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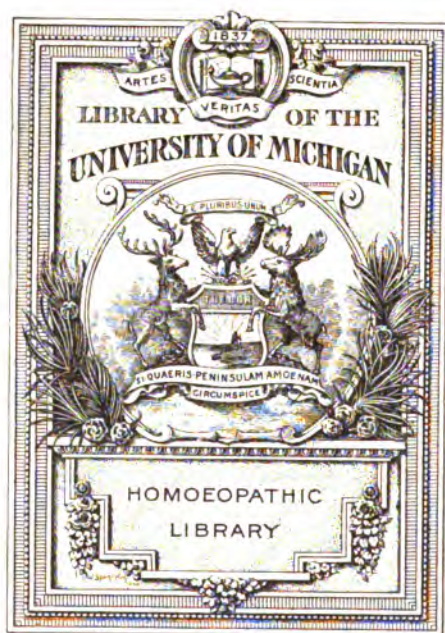
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DIAGNOSIS BY "INTUITION."

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FARMINGTON, MINNESOTA.

At the 1900 meeting of our Minnesota Homeopathic Institute there was on the program a paper entitled "Intuitive Prescriptions," and great was the disappointment of some when the secretary announced that this feature of the meeting would have to be omitted, because the author was not present, nor had he sent in his paper. One of my friends in giving vent to his effusive lamentations, detected a slight smile on my face, and at once berated me for not believing in intuitive prescriptions. Now, as a matter of fact, I do not believe in them, and could cite instances where I had made a diagnosis and prescribed the remedy before even seeing the patient, had subsequently found that the diagnosis and treatment fitted the case to a dot, had marvelled muchly thereat, and had afterward tried to unravel the psychic phenomena involved. Whether these incidents were really intuitive or merely coincidences, or whether my cerebral machinery unconsciously forced the patient to fit into a pre-arranged diagnosis, I am as yet undecided. The question is still sub judice.

To give an intuitive prescription implies the ability to diagnose by intuition, to perceive and comprehend immediately, without the intervention of argument or testimony, just what ails the patient; to discover diseases and their symptoms without asking questions. This means a method of procedure much after that used in treating horses and babies; and yet it is occasionally a successful one, as is evidenced by the fact that some horses and babies survive the ministrations of their physicians.

The process I refer to is one which depends upon the accurate use of the senses normally given to man, and not the methods employed by those fakirs who diagnose by a lock of hair or by going into trances.

I firmly believe that there is much in the art of diagnosis that is unlearned by the ordinary physician, because he has been educated to depend too much upon cross questioning his patients, and upon bacteriologic signs. He has been taught the many phases of disease germ life, and may have taken a course of instruction in physical diagnosis, where he learned to distinguish the grosser manifestations of disease, to use the stethoscope, laryngoscope, sphygmograph, ophthalmoscope, thermometer and various other meters, graphs and scopes. But very few physicians have had any attention given to the special cultivation of those powers of observation which nature gave them. As a result they are ignorant of and overlook many minor details of diseases. Every once in a while some one bobs up with the announcement of a newly discovered symptom of disease, which has doubtless always existed but has been persistently overlooked or ignored.

How many of our practioners have even a smattering of the "sciences" of phrenology, physiognomy or character reading? How many know anything of the landmarks of the human body or of artistic anatomy? And yet before you and I were born there were books printed on these subjects; today there are to be had without great expense Fowler's Phrenology, Stanton's Encycloedia of Face and Form Reading, and many similar works of more or less value to the physician. Prof. Luther Holden's "Landmarks, Medical and Surgical," have for years been incorporated in the American editions of Gray's anatomy, and I'll wager ten cents against a brick watch that not one doctor in a thousand has studied those pages as Holden suggested they should. I think it would be a good idea for our professors to give less time to the almost never used surgical anatomy of hernia and the triangles of the neck, and devote a little time to Holden's clinical anatomy.

Prof. Alfred L. Loomis said: "Physical diagnosis is a term used to designate those methods which are employed for detecting disease during life, by the anatomical changes which it has produced." Furthermore: "There are six methods of eliciting these signs, termed 'physical methods of diagnosis,' viz., Inspection, palpation, mensuration, succussion, percussion, and auscultation. The most important of these are auscultation and percussion. The other methods are only subsidiary to these two, and can seldom be regarded as furnishing a positive evidence of disease."

From what I have already said it can be seen that diagnosis by intuition deals with those "seldom" occasions mentioned by Prof. Loomis; that is, there are times when it is possible to accurately diagnose diseases

without going through the usual forms of physical diagnosis and without seeking for subjective symptoms.

There are also times when such methods of diagnosis, if reliable, would be very desirable. Nearly every physician of experience has come in contact with that "cute" class of persons who, when you ask them the nature of their trouble, answer, "That's what I came here to have you tell me." On such an occasion it comes very handy to be able to surprise these people with how much you can tell about them if they will keep their mouths shut.

Intuitive diagnosis is a term applied to those methods which are employed for detecting disease during life without the assistance of the patient or of artificial aids. These methods are inspection, audience, olfaction, palpation and the use of that peculiar psychic faculty known as "your wits." The most important of these are inspection and your wits. Having unbosomed myself of this bit of preliminary verbosity, let us proceed to a narration of the outward and visible sign of inward and physical disease, with the hope that the meager data here presented may stimulate others to further study of the art, until finally some more worthy student may be able to present us with a complete text-book upon "Diagnosis by Intuition."

When a patient is first ushered into the presence of a physician the latter instinctively takes in at a glance the entire physical and psychic appearance of the patron; the patient in his bodily whole and his mental ego give out an impression which more or less influences the physician in his diagnosis and treatment later on. This impression, which has been variously designated as presence, bearing, a "good front," a "poor showing," etc., is oftentimes a premonstration of actual facts as developed by subsequent examination. The elements going to make up this impression are the gait when walking, the attitude when standing or sitting, the ability to stand or sit alone, the control of the various groups of muscles, visible pathologic lesions, the appearance of the patient's clothing, apparent and actual age, prominent deformities or defects of development, and, quite often, the speech and voice. These are matters which the mind grasps in its first preliminary survey of the patient, then at your leisure you go into details and take in the peculiar aspects of the hair, the head, face, features, neck, lung action, tongue, teeth, hands and arms, chest and body outlines, and the lower extremities. Carefully scan each and every region visible to the eye, touch such parts as are unclothed or may be felt of without offending, listen for unnatural sounds, and be alert to detect those odors which are emitted in certain pathologic conditions.

Walking.—Probably the most noticeable thing about a person is any peculiarity, exaggeration or abnormality of their gait. And yet how few

of us can give an accurate and correct description of the normal method of locomotion in a healthy person. Until the advent of instantaneous photography, walking, running, jumping and similar actions have always been pictured as graceful, but Edward Muybridge, with his consecutive instantaneous negatives, destroyed our ideals and brought us to a consideration of these things as they really are. The proper exercise of the functions of locomotion involve the integrity of all muscles, bones, joints, tendons and ligaments, nerves and skin of the entire lower extremities—from pelvis to toe nails.

Observe a soldier as he stands in line awaiting orders: "Company! Forward!" and unconsciously and imperceptibly the weight of the body is thrown upon the right foot. "March!" and the man throws his left foot forward to take an advance step. He raises a little on the ball of the right foot, and barely has the left foot touched the ground ere he gives a spring with the right, which imparts to the body an impetus, throwing it vertical over the now firmly flatly planted left, where it balances momentarily while the right foot advances, and until the right heel touches the ground. Then the left foot clears the ground and swings forward, advancing one step. The limbs alternate, rising and springing, with their pendulum movements, and the feat of walking is accomplished. In every individual there is more or less of a slight lateral rolling or swaying, and a rise and fall of the body. Also it is usual for the arms to swing—the left arm co-ordinating with the right leg and the right arm with the left leg. In health there is a firmness, an elasticity or spring in the gait which denotes perfect control of the limbs. If the co-ordination that exists between nerve or muscle, be destroyed, or in the least impaired, the individual becomes a paralytic, complete or partial, and it is more or less impossible for such a person to walk naturally.

Walking is acquired by most children by the time they are sixteen months old. Should the baby show no signs of walking by the time it is eighteen months old the physician is justified in suspecting rachitis, unless there be some palpable cause, such as paralysis, joint disease, a general lack of development of the nerve centers, etc. Even after walking has been more or less acquired, further progress may be arrested by the intervention of rickets, or some simple acute disease as a cough or diarrhoea. Paralysis in children can readily be detected by observation as healthy or non-paralyzed babies are almost never quiet, especially in the presence of the doctor. In the adult, the gait, even in health, reveals many things. There is the brisk walk of the business man or busy clerk, the slow and more deliberate stroll of the minister, the policeman, and the retired merchant, the rolling gait of the sailor and railroad man, and the swagger of the tough, or sporty citizen, or citizeness, which latter con-

tures up visions of chancres, gonococcic ravages and other venereal manifestations. Alexander Walker, in his *Analysis of Beauty* (London, 1836) outlines certain characteristics of the walk, which indicate the shape and development of the limbs of women.

"If the walk, though otherwise good, be heavy, or the fall on each foot alternately be sudden, and rather upon the heel, the limbs, though well formed, will be found to be slender, compared with the body. * * * In women of this conformation, moreover, the slightest indisposition or debility is indicated by a slight vibration of the shoulders, and upper part of the chest, at every step, in walking."

"If viewed behind, the feet at every step are thrown out backward and somewhat laterally, the knees are certainly much inclined inward" (knock kneed). "If viewed in front, the dress, at every step, is as it were, gathered toward the front, and then tossed more or less to the opposite side, the knees are certainly too much inclined."

"If in the walk there be a greater or less approach to the marching pace, the hip is large, compared with the other parts of the limb. If * * * the tripping pace be used, as in an approach to walking on the tip-toes, the calf is large."

"If * * * the foot be raised in a slovenly manner and the heel be seen at each step, to lift the bottom of the dress upward and backward, neither the hip nor the calf are well developed."

By closely scrutinizing the gait it is often possible to diagnose deformities and diseases of the joints. In ankylosis there is always a perceptible lack of motion in the affected joint, which can be recognized at a glance. If there be disease of the point the loss of function is accompanied by more or less evidence of pain and a marked disposition to keep the joint quiet. This is especially noticeable in Pott's Disease of the spine, where the back is held rigid and the gait is a shuffling one.

The person who wears an artificial limb cannot conceal that fact, though recent improvements in prosthetics enable the manufacturers to supply limbs that very closely simulate the functions of the natural limbs. The wearer of an artificial limb resembles the paralytic to a certain extent and there is a stiffness, awkwardness and heaviness about the gait that cannot be entirely overcome. The stumbling gait of the clubfoot, the wabbling of the knock-kneed and bow-legged are too apparent to need more than mere mention. Where unusual shortening of the limb has followed injury or disease, there is apt to be a limp, and I have known many persons suffering from rupture to limp, in their efforts to "favor" the ruptured side. One patient whom I treated for rupture had acquired this habit to such an extent that for years after his cure he walked as though he had hip joint disease.

Lost manhood sharks tell us that the boy who masturbates has a peculiar gait which is symbolic of his "secret sins." This view seems to be shared by some physicians who do not pose as sharks. Dr. J. H. Kellog, of Battle Creek, Mich., says: "In a child a dragging, shuffling walk is to be suspected. Boys in walking fast show none of that elasticity which characterizes a natural gait, but walk as if they had been stiffened in the hips, and as though their legs were pegs attached to the body by hinges. The girl wiggles along in a style quite as characteristic, though more difficult to detect with certainty, as girls are often so "affected" in their walk. Unsteadiness of gait is an evidence seen in both sexes."

Every student of the genital reflexes knows that in phimosis of the penis or clitoris there is a stumbling, shuffling gait.

Rheumatism is an affliction which stiffens the joints and materially affects the gait so that the victim is often totally hors de uric acid, or only able to locomote by the aid of crutches or a cane. Such cases are most commonly met with in dry seasons where there has been very little rain fall, notwithstanding the popular belief to the contrary. In sciatica the tendons of the leg are drawn, resulting in an apparent shortening and a consequent limp. The patient holds the knee semi-flexed and throws the body weight upon the sound side by leaning to that side—a method which relieves the affected limb and at the same time develops a well marked curvature of the spine, with the lumbar curve toward the sciatic side and a compensatory dorsal convexity toward the normal side.

Many cerebral and spinal diseases affect the gait, and such manifestations are in some few cases pathonomic, though usually they must be considered along with other symptoms. Thus we find in hemiplegia that with each step the paralyzed side of the body is lifted and the leg is swung forward by a twisting movement in which the pelvis is raised and the shoulder tilted toward the healthy side. The leg hangs limp and dead and swings with very little or no bending at the knee, the foot drags upon the ground and the toe and outer part of the sole of the shoe are rapidly worn away. This gait has been termed the "sickle walk" by the French, because of its swinging half circle movement.

When you see a patient with a shuffling gait, in which the feet are not lifted from the floor or barely so, where one foot hardly advances in front of the other as the steps are taken, where the progress is slow, where the knees are not stiffened and do not interfere, you should investigate for a complete history of paraplegia.

Another person comes to you with a sort of "hopping gait," the feet are toed in and seem to be magnetized to the floor and are scraped along, the body is thrown forward to enable the feet to be dragged along, the leg is stiffened at the knee and as it swings into position under the body there

is more or less tremor, sometimes causing the patient to execute involuntary "clog steps." Occasionally the knees are interlocked and the patient stumbles and falls, especially should there be any obstruction in his path. Such a person is to be suspected of having spastic paraplexia.

Quite frequently we meet old people who seem to be in a great hurry to get somewhere. They move along with a trotting gait, body leaning forward, head held stiffly, hands trembling and either held in front or holding to the clothing at their side. When they start to walk they hesitate a moment as though getting the lay of the land and then start off suddenly, and having once started it is often difficult for them to stop without catching hold of some other person or some fixed object. If bumped into or pushed they totter backward or sideways several steps before regaining their foothold. These people suffer from the shaking palsy, paralysis agitans or Parkinson's disease.

The gait of hysterical palsy is a dragging, shuffling one, with one foot more affected than the other; there is no "sickle walk" as in real hemiplegia and the patient is prone to depend for support upon a cane or crutch, or by holding on to furniture as he walks about indoors. These same phenomena are also common in the various reflex paralyses. Victims of ataxia present marked deviations from the normal gait. In tabes dorsalis the legs are flung about as though beyond control, although in reality there exists no paralysis; the feet are raised higher than necessary and brought down with a flop which gives the gait a stamping sound. The patient is careful to watch the path, seldom raising the eyes, is apt to wobble more or less, bumping into objects and persons, and usually walks with one or two canes. In the family ataxia, or Fredreich's disease, there is clumsiness in walking, manifested when the child is first affected; the child stumbles over little trifles and becomes more and more unsteady on its feet until finally there develops a drunken, staggering gait. There are other children, usually presenting a well fed appearance, who approach you with a wabbling gait and with the shoulders thrown away back. These are apt to suffer from pseudo-hypertrophic paralysis.

Where a change in the gait is evidently due to loss of control of some particular set of muscles; where it is of a spasmodic chronic form, with dragging footsteps, or with an exaggerated roll, it is probable that there exists progressive muscular atrophy. In patients suffering from cerebellar diseases there is a staggering, with the reeling gait of the intoxicated, due to loss of co-ordination of the leg muscles. In multiple cerebro spinal sclerosis we find a combination of the cerebellar staggering and the spastic symptoms; there is a general twitching of the muscles of the body and a jerking of the head; the knees are drawn in, legs rigid, toes turned in and dragging along the ground. Some years ago Charcot described

a gait which he called "steppage," in which the foot is raised high from the ground by flexion of the thigh, the leg is thrown loosely forward with the toe dangling. In putting the foot down the outer border touches first. This is the gait of multiple neuritis. Total loss of locomotor function may be due to any severe cerebral or spinal disease, or to traumatism affecting the cerebral centres or the spinal cord at or above the point of exit of the nerves supplying the lower extremities. The many variations from the normal gait may be imitated in patients suffering from hysteria, and some of the greatest deviations from the normal may be due to nothing more than a tender corn, an inflamed bunion or a trivial injury to the foot, knee or hip.

"ATTITUDE."

Once the patient is in the presence of the physician, either standing, sitting or lying, the attention is given to the attitude of the body. The ability to stand erect involves the ability to preserve the center of gravity within the space covered by the two feet and between them. This line of gravity corresponds with a vertical line running from a point just in front of and midway between the two ankles. The center of gravity of the body is at the tip of the sacrum. In maintaining the erect position it is essential that the plantar toetils sense be intact and that the many muscles of the limbs, body and neck be possessed of their normal functions. The muscular effort is not great if all act in concert, but should any set or group of muscles fail then additional work is thrown upon the others to maintain a compensatory action. Should the plantar sense of touch diminish, the duty devolves upon the sense of sight.

Most individuals have learned to stand by the time they are one year old, some as early as the sixth month, though such precocity is not to be encouraged as it may induce bow-legs, knock knees or a weakness of the ankles. Persons of peculiar habits or trade often give evidence of such by their attitude in standing, thus those of studious habits or who are given to sedentary labors are often round or stoop shouldered, the professional wet nurse carries the right shoulder higher than the left, the shoemaker leans forward from the hips, the seafaring man and the railroader stand with feet apart from the habit, borne of necessity, of maintaining a broad base, the jockey is apt to be "hunched up" around the chest, the acrobatic contortionist is sway-backed and bow-legged, and so many other occupations and habits leave their marks upon the body.

Women who suffer from diseases of the abdominal viscera usually present the attitude of being ready to fall in a heap on the floor. They may present a fair appearance when dressed for the street, but strip one of them of her artificial supports and instantly she collapses and assume that dropping position characteristic of lack of muscular tone.

The attitudes assumed while standing, by patients suffering from various diseases, are often pathognomonic, as for instance that of the child suffering from spondylitis, where the body is held rigidly straight and stiff, the shoulders elevated and the arms abducted. Ask such a child to pick an object up from the floor and it will squat until the object can be reached without bending the spine. If the spondylitis be in the cervical vertebrae the head will be carried either markedly flexed or extended.

Wry neck, club foot and aggravated cases of spinal curvature are so palpable that there need be no hesitancy in diagnosing them by intuition, but there are cases of spinal curvature where the only visible evidences, when the patient is clothed, are a tipping of the pelvis and an inequality in the shoulder heights. Curvature of the spine may be a symptom of congenital asymmetry, of inequality in the lengths of the lower extremities, of rickets, or protracted living in decidedly unhygienic surroundings, of acquired faulty positions in standing or sitting, of constant work at some trade requiring a one-sided use of the body and arms, of sciatica, of chronic malaria or long standing rheumatism, of empyemia, myositis, cerebral hemiplegia, poliomyelitis and even of genital or rectal disease.

In spastic paralysis there is a drawing together of the knees due to a contracture of the muscles and the partial flexion of the joints at the hip, knee and ankle. Where there is pseudo-hypertrophic paralysis the back is arched, giving the patient a sway-back appearance, and the feet are spread apart to enlarge the base of support. In attempting to rise from the recumbent posture the movements are characteristic. Whenever you see a patient whose shoulders are thrown well back beyond the line of the hips and the abdomen slightly forward, or where the abdomen is unduly prominent and the lumbar spine strongly arched forwards, associated with atrophied and drawn hands, you can suspect progressive muscular atrophy. Cases suffering from cerebro-spinal sclerosis present the attitude of a drunken person with the uncertainty of equilibrium and the constant wavering in the effort to stand steadily. Sciatica presents a picture of one leg slightly drawn up with the foot resting upon the toes only and the weight of the body partially supported by a cane.

In the various forms of ataxia the patient presents that swaying attitude which we have come to look upon as characteristic of all ataxics, and which is aggravated when the eyes are closed. Paralysis agitans gives us the picture of a person apparently bowed down with sorrow, the body is inclined forward, the shoulders stooped and the head bowed; there is usually present the tremor found in this disease. A somewhat similar attitude is noticed in acromegalia though the distinction can readily be made by the osseous deformity and the absence of tremor.

The posture when sitting is occasionally indicative of certain patho-

logis conditions, though this is a hard matter to decide definitely because of the multitude of positions assumed by healthy human beings when sitting. Such quadrupeds as sit invariably assume the same position; monkeys, apes and bipeds of that class have their peculiar attitude, but with the animal *Homo sapiens* it is different. He may sit erect upon the buttocks, or may tip his chair back so that his shoulders touch the wall and his head decorates the paper with grease marks, he may cock his feet up higher than his head or he may sprawl out in the chair, his weight upon the sacrum and his feet spread wide apart; he may sit with his feet flat upon the floor, heels together and toes out, or he may sit with one foot crossed over the other or perched upon the knee. Some women have a habit of sitting with one or both legs doubled up under them. Many men are in the habit of sitting stooped over with the hands or elbows resting upon the thighs, an attitude quite characteristic of paralysis agitaus. A symptom which is often of much value in obscure cases of meningitis is the following, known as Kernig's sign: where such patients show no evidence of contractions in the limbs while lying on the back, as soon as they are placed in the sitting position the contractions become very evident. The legs are flexed on the thighs and the thighs on the pelvis so that it is almost impossible to straighten them out; the stiffness in the neck is also more marked when the patient is in the sitting posture.

The normal position when lying is with the lower limbs fully extended and the body upon either side. This fact was brought very forcibly to my attention some years ago when I was at the head of the medical missions of the Episcopal Church in Central Africa. With half a dozen native boys I had made an extended trip into a new part of the country, visiting places where a white man had never been seen, and was looked upon as a myth. One night after a long day's journey and much hard work we reached a native village about 10 p. m., and as I was completely tired out, I retired to the house which had been set apart for us as soon as I had paid my respects to the village chief. My canoe boys joined the villagers in a moonlight harvest dance. Somewhere along about 2 a. m. I was roused from a sound sleep by being roughly shaken by one of my men.

"Daddy, you sick?"

"No, why?"

"Wha' for you sleep all doubled up then?"

And the natives then told me that a healthy person always slept stretched out full length and that only sick folks drew their knees up under their chins. I told them that I reserved the right to sleep any old way I wanted to, and rolled over on my mats to try it once more. Nevertheless I have never forgotten that healthy people sleep stretched out full

length. There are a few attitudes assumed by patients confined to bed which have come to be looked upon as symptomatic of certain diseases. For instance, where a child bores its head into the pillow, rolling it from side to side, the thumbs flexed upon the palms during sleep, and the abdomen is retracted, the indications point to acute hydrocephalus. In cases where there is marked oposthatonos, with rigidity of the muscles of the back and neck, fever and a purplish eruption, the patient is probably suffering from cerebro-spinal meningitis. In purely spinal meningitis the legs are drawn up and there is the same oposthatonos. Where the limbs lie motionless, paralyzed, and the muscles become flaccid, suspect acute poliomyelitis, especially if there also exists tremor and twitching of the facial muscles.

When you see a bedridden patient who is apparently suffering from ankylosis of all joints of the lower extremity with the legs fully extended and strongly adducted, frequently so much so that they are crossed like open scissors, examine further for paraplegia. Sometimes in these cases the legs are extremely flexed instead of being extended. Should the patient be rigid from head to foot, lying in a natural position, or retaining indefinitely any position in which the limbs are placed, there exists that form of so-called hysterical neurosis known as catalepsy. These patients can sustain the weight of the body by merely resting upon the heels and occiput or a limb will be held indefinitely in the air without support. The hysterical forms of paralysis afford a multitude of recumbent attitudes which to the laity are most bewildering and terrifying, but by the experienced or knowing physician are readily reduced to their proper importance.

There are many peculiarities of attitude in the recumbent position which point to disease of certain regions or portions of the body, or to symptoms which may be associated with several diseases, thus a tendency to sink down in the bed, sliding to the foot, is indicative of extreme muscular weakness. Distressing dyspnoea, a sense of suffocation while lying down, a constant desire to sit up, general agitation, some cough and anxiety point to hydrothorax. Position upon the back, knees drawn up, head and shoulders slightly elevated and a very manifest dread of motion indicate inflammation of abdominal viscera and acute pain. Position upon the face, pressure on abdomen affording relief, great restlessness, indicate spasmodic abdominal pain.

The Necessity for the Removal of Irritation at the Lower Orifices of the Body in Nervous Maladies.*

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I desire to greet you with the assurance of the pleasure it gives me to respond to the very courteous invitation extended to me to meet with you and to present a short paper for your discussion.

The title suggested to me by your honored secretary, is really a question. The entire answer to it might very easily be answered in a single sentence. It is absolutely essential to the cure of many nervous maladies, that the irritation at not only the lower orifices, but at all orifices be removed. Just at this time the world has brought to its attention the fact that a bullet may be lodged in a part of the body and cause no special concern for the patient's safety. This simply is because it is so located as to cause no irritation. It must be remembered though, that under different circumstances, it not only might, but would cause the greatest concern. That very serious consequences would necessarily follow, and that in order to prevent such results immediate removal would be absolutely demanded.

In looking over the etiology of the diseases of the nervous system not only of the functional, but the organic as well, we are struck with a very salient fact;—the frequency with which irritation of various kinds is followed by these diseases, and the many instances in which irritation is clearly the only etiological factor present.

The entire activity of this, the most wonderful of all the systems that form a part of the great machine, the human body, is the result of irritation. It is in ordinary healthy conditions purely a normal irritation producing healthy activity. As tremor is a normal condition, is always present and causes no inconvenience so long as it is normal, but may from various causes become abnormal, and at once be the harbinger of or the most prominent factor in very serious diseases, so abnormal irritation may cause the most dire results.

It is through natural irritation that the blood circulates evenly and regularly through the entire body. That each part gets just that amount which it needs under existing circumstances at all times. Never too much, never too little. An increased supply when needed, a decreased supply when not needed. It is through normal irritation that the nervous system guards most carefully every step in the process of digestion and nutrition. It is from normal irritation of the nervous system that every function of the body is performed.

This normal irritation controls all nerve activity. All nerve force.

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Nerve force is a form of motion. It is analagous to other forces of nature in this way. The motion is in the form of vibration of waves, of varying amplitudes, varying lengths, and of varying rapidity.

In normal activity these waves traverse the great net work of nerve fibers rythmically from center to center, ganglion to ganglion, center to periphery, and periphery to center.

The impulse always causes the exact character of wave or vibration essential to the accomplishment of the desired purpose.

It traverses automatically the line of fibers that it should, each center, each ganglion is tuned to receive and transmit with unerring accuracy these vibrations, and to modify them according to the special needs.

The great delicacy of this the most wonderful part of the human being is such that we cannot imagine anything so infinitesimal as not to have the power of influencing it. That it has a very great power of adapting itself to unnatural conditions, and of resisting abnormal irritation is settled beyond dispute.

For its accuracy in receiving, modifying and transmitting impulses it must depend on the neuron with its exones and dendrites.

So long as these are normal in all respects the nervous system will perform its functions correctly and all vibrations will be rythmically of proper amplitude, length and rapidity.

These delicate little cells are, however, capable of becoming fatigued, by too constant effort, also of becoming poorly nourished themselves. They then are incapacitated for the proper performance of their function. These neurons control the entire metabalism of the body. That which renders them incapable of correct function must interfere with the proper nutrition of other organs. This must result in functional or organic disease.

If what has been said is true constant abnormal irritation in the lower orifices of the body causing as they do irregular, unrythmical and unnatural vibrations over fibers to centers and ganglia cannot help in time producing fatigue and malnutrition of the neuron. This delicate little structure has great resistance, but not sufficient to overcome the influence of this constant unnatural hammering. It may be only sufficient to cause irregular vibration, to change the amplitudes, the lengths or the rapidity, but neither of these will change the function and possibly the nutrition. The result must be functional or organic disease of the larger nerve structures.

It is, I think, reasonably clear that until normal vibration is established, the normal function in the neuron cannot exist. Normal vibration cannot be established until abnormal irritation or impulse is removed. This can only be accomplished by the removal of the source of the un-

natural impulse. As yet no means have been discovered to remove these sources of irritation in many cases except operative interference. This means that operation for the removal of all sources of irritation in the lower orifices of the body are positively essential to the cure of many functional and organic nervous diseases as well.

It means that so long as the source of irritation is present the remedies adapted to the cure of these diseases cannot act properly.

It means that in some cases the removal of these sources of irritation will simply place the patient in a condition in which the correctly chosen remedies will produce a cure. It means that in other cases the cure will follow without the aid of other remedies.

Cases of Insanity Cured by Orificial Methods.

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In the consideration of these cases there will be no attempt at classification. I shall only give a brief history of each, the means employed and the results obtained, leaving every one decide as to the merits or demerits of the treatment. I have selected only those cases in which sufficient time has elapsed to demonstrate the permanency of the cures.

Case 1.—Mrs. S——, of T——, aged 62, had been an invalid for seven years; the history as given by her physician is as follows: First she became constipated, suffered with indigestion, pains in abdomen, had attacks of sick headache, followed with morning diarrhoea. She became despondent, nervous and melancholic. She had been treated years before by Dr. V——, of G—H—, for quite a time with only slight benefit. She then went “doctor hunting” until she had been under the professional care of seven physicians without lasting benefits. Then, after seven years had elapsed, she returned to Dr. V., who, knowing his inability to meet the requirements of the case, and feeling he could not turn her away, came for me.

I was taken to the patient and found an old gray-haired lady who greeted me with a wild look and said: “I have a tumor, I have a tumor; won’t you take it out, won’t you, won’t you?” and while making this urgent appeal she would grasp her pendulous abdominal walls with both hands and pull it up and out while pitifully asking me for relief. After a careful examination of the abdomen I could discover no tumor, nor anything that resembled one, in fact the examination so far was negative, and I told Dr. V—— so, and asked him to say to our patient, we would like to examine her womb and rectum. This she readily consented to have us do. After an anesthetic had been administered, the uterus and

appendages were examined and found in a normal state for one of her age. The rectum was then dilated with a bivalve speculum, exposing the pile bearing inch, and beyond for perhaps five inches. When the instrument was opened there came into view hemorrhoids, papillae, pockets, and a large ulcer about one inch in length and about one-fourth of an inch wide. The ulcer was indolent, ragged and dirty; there was also a general proctitis as far as I could see. The parts could scarcely be touched anywhere without their bleeding. Here certainly was an object lesson for a student in orificial methods. This rectum with its troubles had been a "thorn in the flesh" for years; it had certainly been a provoker of discord in the harmonious working of the great sympathetic. These pathological products of civilization had been the rock upon which her mentality had been wrecked and all her physicians so far had failed to discover the primary lesion or institute a line of treatment which brought permanent relief. A few slits in the mucous membrane and the hemorrhoids were turned out and removed, the elongated, reddened and irritated papillae were all snipped off, the pockets were clipped out and the indolent ulcer was curetted, cauterized with carbolic acid, washed and dusted with borated calendula powder. I may say the rectum was fully dilated during the operation and again when it was over. The case made no perceptible improvement for about six weeks, when her mind began to improve, and after a time she regained her normal state. Gradually the various processes of life were re-established, her mind and body became well. Now, after four years, she is in the full enjoyment of life and health and Dr. V—— says she sings my praises to all who ask in regard to her welfare.

Case II.—Mrs. M——, of our city, aged 35, mother of two children, the last one three years of age. From the birth of the youngest child she has not been well. She has suffered with severe headaches, was sleepless, nervous, despondent; she insisted she was losing her mind and that we were going to take her to the hospital for the insane. She had become careless about her home and children, her own appearance was that of indifference and carelessness, clothes torn and dirty, hair unkempt. She would sit for hours on the floor in a melancholic state or idly play with the children in childish games. At times she would be in tears, most of the time for hours. Her menstruation was irregular, scanty at times, and then profuse. She was constipated, and suffered with indigestion.

Upon a physical examination we found the perineum torn down near the sphincter, the uterine cervix had a bi-lateral laceration of great importance, the edges of the rents were turned out, eroded and puffy, the rectum was filled with hemorrhoids. Here certainly was cause enough

to unsettle the nervous system of the most resolute.

The alimentary canal was cleared out and some other minor details in the preparation for the operative procedure were made. The patient was anaesthetized and the uterus was thoroughly curetted, cleansed of all debris, cauterized and for a time was packed with iodoform gauze, the scar tissue was cut away and when done we had a rent which included the uterine artery on both sides, the wound was taken up with silkworm gut and perfectly co-apted. The rectum was then dilated and cleared of a mass of hemorrhoids, papillae and pockets. The dilation was thorough and repeated several times during the treatment. The usual directions after such cases were followed and the patient was permitted to go one month at which time she was again anaesthetized, the rectum again dilated and some parts were touched up again. The perineum was then prepared and taken up with silk worm gut stitches and after the usual time had elapsed were removed. Within a few days the patient became more quiet and cheerful, she grew to take an interest in her home and children, was less tearful, did not talk of insanity, took more interest in her personal appearance and there seemed a betterment in mind and body until she had fully recovered. It is now four years and the patient is still well, has borne another child, was not injured in childbirth and all is well in the home that was once so disturbed.

Case III.—Mrs. G——, of T——, aged 28, came to me about three years ago, had been in ill health for several years, had recently come from a sanatorium for nervous diseases where she had been for four months, the proprietor of which was the former superintendent of one of our state institutions for the insane. She was gradually growing worse, becoming more nervous, wakeful, restless and loquacious. She was losing flesh day by day until she was greatly emaciated. Her mind seemed impressed she must be watchful for snakes. She saw snakes on the chairs, under cushions, pillows, she would not retire at night until the bed clothes had been removed from the bed and shaken, and unless she was put to bed at once the clothes would have to be reshaken after which she could be induced to retire. Cushions on chairs must be lifted and turned over before she would sit down, she could not be induced to have her clothing put on until each garment was turned and shaken. Snakes were her bete nore.

Her bowels were constipated, menses absent or occurred only at long intervals. She is the mother of three children, at the birth of one, she does know which, she suffered an extensive double laceration of the cervix which was left a long time before an attempt at repair was made and when done was so bunglingly taken up it did no good. Her nervous symptoms continued, she could not dress herself without assistance,

suffered with pains in the head and back. I might say right here her father has been an inmate in one of our state institutions for the insane for 15 years without improvement. This certainly was not an encouraging case for the reputation of an orificialist or orificial methods. She was, however, anaesthetized, the uterus thoroughly curetted, washed and cauterized with carbolic acid, being lightly touched over the endometrium, the scar tissue was carefully removed, the uneven edges of the rent were also trimmed off until coaptation was accurate. They were then brought together with silk worm gut stitches which were left in position the usual length of time and then removed. The rectum was carefully inspected and a mass of hemorrhoids found and removed, two large papillae excised and the rectum thoroughly divulsed; the sigmoid was irrigated and treated with balsam peru spread upon a woolen covered tube. The patient remained in the hospital for nearly four weeks, gradually becoming more quiet day by day. She became less talkative and the snakes did not trouble her so much. She was sent to her home much improved and has continued to grow better for two years. She has now gained twenty pounds, is rational, menses have returned, appetite fine, and she does most of her own work. I saw her husband within the last week and he told me she is well, has only one symptom which annoys her, and that is at intervals she sees snakes, and while she knows there are none, she feels better satisfied to look about a little just to be sure.

Case IV.—Mrs. S——, of N——, aged 30, had been an invalid for many years, in fact since she suffered an attack of enteric fever. She was wakeful, nervous, had hallucinations, talked at random, was morose, despondent and was at times suicidal. The family told me they “thought her crazy.”

After a preliminary treatment with some baths she was anaesthetized, the uterus was examined and found fairly normal. The clitoris was bound down by adhesions which were loosened, the hood clipped away and quite an amount of smegma removed. The rectum was inspected, three small hemorrhoids were removed by the slit method, and a very large red papilla was excised at its base. This papilla was no doubt the greater nerve disturber and did much to disorder and unsettle our patient. After the rectum had been cleared of its nagging growths, sphincters completely divulsed, and the parts rendered sanitary, the patient was put to bed and left with instructions to the family if she slept she should be left alone. She slept well all that night, all the next day and night, and the following day and night. The next morning following, the lady of the house appeared at my office saying “We are becoming alarmed about Mrs. S——,” and upon inquiry found the patient slept naturally, was only wakened at intervals and given food and drink; then she went to sleep

again. I told the lady to let her alone until she got her nap out, as she had slept but little for months. She slept almost continuously for four days and nights, when she wakened and seemed quite natural and contented.

She remained in our city for four weeks and gained ten pounds, then went home, made a fine recovery and has continued well ever since, now nearly five years.

Case V.—Miss Mary H—, of H—, aged 24, unmarried, was an invalid for several years, had been gradually losing flesh, suffered with headaches, poor digestion, constipation; was restless, discouraged, and finally became morose, disrespectful and at times showed symptoms of insanity, would get angry at trifles, abuse her mother and sister and almost resort to violence over trivial things. These symptoms gradually grew worse until she became a raving maniac, would tear her clothes off, had to be cared for like a child, and had to be tied to prevent her doing violence to herself and others. She would eat dirt, was obscene, profane and vulgar, and the family was compelled to be in constant attendance for fear of violence. They finally took her to a private hospital for the insane, where she was held for five months, a part of the time she was so violent she was kept in solitary confinement, and when removed was worse than when taken there. During her illness she had grown what is termed the “insane ear,” which is thought by some to be an evidence of degeneracy. I was invited into the case by Dr. D—, of this city, who said he did not know what to do for his patient. When we arrived at the house after a hundred mile ride we found a young woman, pale and anaemic, with a wild expression of face and eyes and a restless demeanor. She had not menstruated for months, and was the picture of despair and discouragement.

She was anaesthetized with some difficulty and placed upon an operating table. The examination revealed swollen labiae, the clitoris covered with an adhered hood, the vagina red and tender, the uterus was somewhat enlarged and irritated. There were hemorrhoids, papillae, pockets and a general proctitis. After the parts had been thoroughly irrigated the uterus was curetted, washed and packed with iodoform gauze, the clitoris was unhooded, and some smegma removed, a segment of the clitorion prepuce was clipped away and the sides stitched backed with cat gut. The rectum was dilated and all diseased and abnormal growths cleared away, all parts left smooth and free from the “nags and frets” of life. The usual directions in regard to after treatment were given to Dr. McH—, who was asked to look after the case. The patient became more quiet the first night after the operation and all restraint was dispensed with at the end of the first week. While her mind became better

rapidly she constantly lost flesh for several months until she weighed but 68 pounds.

I saw this patient about one month since. She was the picture of health, no untoward symptoms of any kind. She weighed 120 pounds, had a fine complexion, all bodily functions were normal, mind well poised and fully rational. She told me she was perfectly well, had no complaints of any kind. Her "insane ear" was gone. She thanked me over and over again for what I had done for her. Surely she had good cause for being thankful.

Case VI.—Mrs. G——, of S——, 35 years of age, mother of three children, the last of which was four months old. For two years the patient had been growing careless in regard to her home, children and personal habits, clothing, etc. Her peculiar phase of mental aberration was her solicitude in regard to her spiritual condition, which came only at intervals. When her last child sickened and died she gave it no attention, seemingly wholly indifferent as to any obligation, relationship or duty. Dr. B—— called me 50 miles to see this case. Upon examination I found a stellate laceration of the cervix and a rectum filled with piles, papillae and pockets. The uterine rents were taken up in the usual manner, the rectum fully dilated, all unnatural growths were removed, the outlets of the body were made smooth, adhesions about the clitoris were broken up, the hood clipped off and the wound taken up with cat gut. All parts were made clean and the patient was left under the care of her physician. She made an uneventful recovery, both in mind and body. Her physician was in my office within the last four days and told me she now has a model home, her mind is fully restored, and she has since given birth to a fine boy, which at fourteen months unfortunately died. He said no mother ever gave her little one more patient and attentive care than Mrs. G——, and at the child's death her grief was marked. Still her mind was not disturbed. She had been in good health and fully rational for nearly two years.

Case VII.—Mr. A——, of our city, was brought to me by Dr. W——, is a very large man, weighing perhaps 260 pounds, with a cardiac lesion. All physicians whom he had consulted gave it as their opinion an anaesthetic would prove fatal. He had been an active business man, now he was almost wholly unable personally to care for himself. He became childlike and only at times somewhat erratic. After earnest solicitation I consented to take charge of his case. He was taken to the Deaconess Hospital and after some preparatory treatment was given, at the appointed time an anaesthetic was administered. At first his heart behaved rather badly, but by the use of the bivalve he was revived from time to time until the work was done.

The rectum was a mass of hemorrhoids, papillae, pockets, etc., which had existed so long that the tissues were soft and friable. The American operation was made, the most of the degenerate tissue removed, the mucous membrane brought down and made fast to the anal juncture. When the operation was complete there was a perfect coaptation of the skin and mucous membrane. The fraenum was cut and the urethra was dilated. The degenerate nature of the mucous membrane in the rectum was such that some of the stitches cut through and a part of the wound was closed by granulation. The patient remained in the hospital for four weeks and went away a relieved man. His mind was restored and as one of his neighbors expressed it, "he is a man again." His heart is now regular and he is once more a pushing business man. This case has a history of two years since the operation and all is well.

In giving these cases, the physical conditions were not always remarkable, except the effect upon the minds of these patients. The mode of cure was the same as for the relief of any case suffering in like manner.

While most of these cases were subsequently treated with properly selected remedies, yet it is my opinion the cures were effected mainly by removing nerve impingment, taking off the pressure from the nerve filaments and smoothing the affected and irritated outlets of the body. It is my opinion also if many of those now incarcerated in our state institutions for the insane could have "all around work" they would soon have the mental cloud lifted from their impaired intellects; if these "frets" of life were only removed they could and many would recover.

As general practitioners are we not a little slow sometimes in seeing the trend of our cases, trusting too much to hope and therapeutics, when an inspection of the diseased parts and a little well-directed surgical work would often save a valuable life to home and family. In my brief experience I have had many pleasant and wonderful recoveries in this new work. The further I go in my work along these lines the more faith I grow, cases which I used to dread and often refused, now yield to the later methods.

The better we understand man anatomically and functionally, mentally and morally, all his capabilities and possibilities the better we will succeed professionally.

Materia Medica Plus Orificial Surgery.

WILSON A. SMITH, M. D.,

Professor Materia Medica in Chicago Homœopathic Medical College.

MORGAN PARK, ILL.

If a man puts kindling into a stove, puts fuel on top of that, gets everything ready to start a fire with and fails to strike a match, will he

get a fire? If a man has a load to haul up a hill and works and tugs until he gets the load within a foot of the top then sits down when he really needs but a little greater effort to get the load on top of the hill and fails to exert that effort, will he reach the top? If a physician undertakes to cure a case of constipation and fails to remove the cause, will he succeed?

To each one of these questions asked, the answer will be "No." There is one little thing lacking to complete the efforts exerted to secure a certain result and that little thing that is omitted is the *great* thing which crowns the effort with success. It takes the match to start the fire, it takes a slightly increased effort to raise the load over the hill and it takes a removal of the cause to cure the constipation.

Suppose a patient drifts into your office suffering from constipation; he complains of frequent but ineffectual urging; he has a slight headache, bitter taste in the morning and feels worse then than any other time during the twenty-four hours. Add to this the fact that he is engaged in work that is of a sedentary habit and *nux vomica* immediately comes to the mind of the prescriber as the great remedy for the patient. It may relieve him but will it cure him?

Look over the cases you have had and see how many times *nux vomica* has disappointed you. Is it not a fact that of all the remedies prescribed for this condition none has failed you quite so often as has *nux vomica*? Your faith wavers in the efficiency of drugs, you begin to doubt that internal medicine is founded upon any scientific basis, and you feel somewhat like Job and ready to curse the day you were born into medicine. But is it the fault of the drug or the fault of the physician who prescribes the drug and who fails to go into the merits of the case and remove all the sources of irritation which hang like a millstone around the neck of the patient and prevent the return to health.

Let us get back to the primer of medicine and read from section III in the Organon of Medicine as follows: "If he (the physician) knows the obstacles to recovery in each case and is aware how to remove them, so that the restoration may be permanent; then he understands how to treat judiciously and rationally, and he is a true practitioner of the healing art."

Examine the rectum of the patient who is seated at his work the live long day and you will be surprised to note the extreme rigidity and hypersensitiveness of the sphincter ani. Introduce the finger within the rectum and observe how vice-like is the grasp of that irritable sphincter in the presence of a body that should not be there and then recall the fact that this condition exists all the time, day and night, when the least portion of fecal matter is there, and then ask yourself if you have done all that can be done when you have prescribed *nux vomica* internally for the cure of a constipation of that character.

It is here that orificial surgery or rather orificial work becomes the handmaid of internal medication and comes in to add the little extra help needed to lift your load over the hill top, to furnish the match to start your fire, the stimulant to prod the jaded nerves into an extra effort to throw off the condition which produces constipation, which is a result and not a cause. Remove the cause and your patient recovers and without such removal all the medicine in the world, given under the directions of the best therapist in the world will do nothing but alleviate the condition and the cure will not be permanent until you know "how to remove the cause and remove it."

A girl comes to you on the borderland of anemia. You, as a pathologist, can look across the expanse that lies before the patient and see the condition into which she is drifting much clearer than she. You ask her symptoms and she says: "I feel tired all the time and easily fatigued; I am morose, sad, despondent and have no ambition; there is short breathing after the least exertion and the menstrual flow is becoming less in quantity and is somewhat paler than formerly." You know what the matter is; you know that it is but a step farther on until chlorosis is fully developed, and the face will become greenish in appearance. You know that the girl is standing on dangerous ground, because it is a physical condition which favors the development of insanity.

Let us look into the case a little deeper. What time does it generally develop? About the age of puberty, comes the reply. Right you are. What system is then taking on new life and causing the blushing, happy, romping school girl to become timid and modest and shy? The sexual system, will be answered, and again you are right. Upon what system of nerves does the sexual system really depend for its growth and development, and the answer is returned the Great Sympathetic System and again you are correct. Shall we try remedies first? Certainly. Let us prescribe ferrum, arsenic, sepia, pulsatilla or whatever may be indicated and wait a short time for results.

Supposing you wait and no favorable results appear after a time, are you willing to throw up your hands and permit the patient to sink deeper and deeper into the slough of ill-health? Or would you look for the match to start the fire, or seek for the little extra help to pull your load over the little knoll at the top of the hill? If you are a physician you would do the latter, if you are in the practice of medicine because you feel you can make a living easier in that profession than in any other you might not incline to exert yourself.

Suppose the clitoris is hooded in the girl and there is a constant irritation of the vegetative nervous system and all its efforts are being concentrated upon that portion of the anatomy. Will it watch over the

nutrition of the body and see that it is symmetrically developed or will it fail? You know, as well as I know, that it would permit destruction to go on and on in other parts of the system until at last your patient sinks into an incurable condition. Remove the irritation, free the clitoris from the bands that tie it down, permit the vegetative system to attend to its work in all parts of the system and your patient will recover under the effects of remedies. The bloom of the cheek will return, the bouyancy of step will come back again, the cheerfulness of the mind will blossom forth and your cure will be complete, but without this little work your patient will be aided a little by medicine for a time, and then sink into lower depths of disease than when first prescribed.

Prescribing medicine in these cases without attending to the removal of the cause, ladies and gentlemen, is simply amelioration, to remove the cause and then prescribe medicine is to cure, and we are but carrying to its logical conclusion the dictum of Hahnemann that "The physician's high and only mission is to restore the sick to health." There can be no rivalry between orificial surgery and materia medica, for the former supplements the latter and aids it to complete the work upon which it is started.

Illinois School of Electro-Therapeutics.

Dear Mr. Editor: It is a pleasure to comply with your request for a report of my recent trip to Chicago for a special course in electricity. The Illinois School of Electro-Therapeutics, 1302 Champlain Building, Chicago, gives an excellent course beginning every three weeks. The fee for the three weeks is forty dollars, and this fee entitles the matriculant to return as often for review as desired. Thorough instruction is given on the physics and uses of the different forms of electricity, galvanic, paradic, static and sinusoidal. The first week is given largely to the physics of electricity, with demonstrations of the principles involved, and of the mechanism of electrical apparatus. The second week is clinical and practical, showing the application of the principles of electro-therapeutics to the various conditions for which it is recommended, such as fibroids, hemorrhoids, exophthalmic goiter, ovaritis, naevus, superfluous hairs, endometritis, urethritis, hypertrophied prostate, constipation, hysteria, nervous prostration, rheumatism, etc., etc. The third week is largely review with special work in X-ray technique and therapeutics. The members of the faculty are the best known electricians in the northwest. Dr. C. S. Neiswanger, the president and pervading spirit of the school, has revolutionized electrical therapeutics in many respects by his persistent advocacy of the use of the galvanic positive pole with the cop-

per electrode in the treatment he calls copper electrolysis for inflamed and hypertrophied conditions. Perhaps his greatest contribution to medical science has been in demonstrating that Bright's disease and diabetes are curable by static electricity given in the form of the negative crown breeze followed by positive insulation, in daily treatments for a month or more. He published a list of authenticated cases about three years ago and since then his results have been verified by other practitioners, among them Dr. Ethel E. Hurd, of this city. Dr. Neiswanger is a type of the philosopher, going at once to the underlying principles and then applying them with enthusiasm and a wealth of illustration that make his lectures hold the class for two hours as easily as for ten minutes.

The X-ray work is in charge of Dr. Emil H. Grubbe, of the Illinois X-Ray and Electro-Therapeutic Laboratory, and of Dr. Burdick, the best known X-ray man in the northwest. Dr. May Cushman Rice is a valuable member of the faculty, giving interesting demonstrations of the physical properties of the galvanic current and clinical applications of the same. Leading specialists give lectures on the eye, ear, nose and throat and general nervous system, with careful explanation of the application of electro-therapeutics in their several departments.

The course well repays the busy practitioner for the time and money required.

CORA SMITH EATON, M. D.,

717 Masonic Temple.

MINNEAPOLIS.

Pulsatilla is the remedy *par excellence* for headaches at the menstrual epoch.

Syrup of hydriodic acid has been used with the best of results in chronic rheumatism.

It is said that ten grains of powdered alum placed on the dry tongue will arrest an attack of asthma.

Learn how to tell a good story. A well told story is as welcome as a sunbeam in a sick room.

Learn to greet your friends with a smile. They carry too many frowns in their own hearts to be bothered with any of yours.

Simple tapping, under full antisepsis, may be relied upon to relieve any hydrocele, and will cure a small percentage of cases.

The man is always learning who makes his mistakes teach him something.

Geranium maculatum is decidedly astringent and has been successfully used for ulcers in the mouth, diarrhea, fissure of anus, metrorrhagia, gleet and urethral hemorrhage.

MINNEAPOLIS HOMOEOPATHIC MAGAZINE.

EDITORS.

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EDITORIAL.

Volume Eleven.

We begin this month the eleventh year of our editorial experience. We trust our work has proven acceptable to our readers, and that we may receive the same cordial, generous support that has been accorded us in the past.

We begin the eleventh volume in a new dress and a much improved magazine. We have associated with us this year Dr. Ralph St. J. Perry, of Farmington, Minn., who needs no introduction, whose writings are always read with avidity, and who never writes except when he says something of worth.

We ask for the same courtesy we have always received, and intend to make the magazine of still greater value.

"Will The Worm Turn"?

Under the above heading the editor of the *St. Paul Medical Journal* discusses the ethical and business aspects of the custom most casualty insurance companies have of paying the cost of the first visit in case of accident. He bemoans the fact that the fee is inadequate to the services rendered and the risks assumed by the attending physician; that the physician often finds saddled upon himself a case requiring much care and attention, with no prospect of pay after the "first visit" fee having been paid by the casualty company; and that by their contract the employer

and insuring company have practically shut the doctor out of a fee because the injured party is usually unable to pay for the services rendered.

This is a lot of sentimental twaddle and "ethical" rot. Instead of bemoaning his fate the St. Paul editor should get down on his bended knees and give thanks that some casualty company has seen fit to pay him for his first visit and thus not let him lose the entire bill. He should also look up the law and learn that a contract between an employer and an insurance company cannot affect the relations between the attending surgeon and those responsible for his pay unless the attending surgeon assents to the contract. Furthermore, he should learn that no person outside of a court of law can set a value upon a surgeon's services and if the surgeon does not get sufficient pay for his work it is his own fault, he is either too modest or lacks back bone. And again, no surgeon need ever have an emergency case saddled upon him, as the courts have long ago decided that any surgeon can dismiss a patient at any time by giving him ample notice to get another attending surgeon.

And the remedy proposed is "association." This means another society, some meetings, more officers, "heap big talk" and a lot of gratuitous newspaper and magazine advertising for the promoters. Rats! (Excuse my undignified emphaticness.) The "remedy" for this condition is to "associate" your brains and hands and instruments so that you are ready to respond instantly to any surgical demand. Be prepared to do any operation upon the slightest possible notice and with the fewest possible facilities. Do not accept any call by telephone or messenger unless you know the nature of the accident and have some definite ideas to where the pay is coming from. Bread-and-butterless work has long since lost its flavor, and there are plenty of younger men who are willing to work for "the experience." Personally I would much rather rest easily, reading in my office, than to be out working over some case which offers no cash returns and only the possibility of a suit for damages against some one—perhaps the surgeon. That may sound cruel hearted and cold blooded, but that very same attitude has done more to elevate the value of my skill in the eyes of the public and protect my estate from damage suits than any other one item in the catalogue.

To meet this alleged trouble be ready to act promptly and thoroughly at your first visit. Don't apply a temporary dressing and then go back to your office for your instruments, but take your paraphernalia along the first trip, do the whole thing up at once, and then when the casualty adjuster comes for your bill for "first visit" make it out plenty big enough to cover the value of the work you have done. If the case is one apt to require continued attendance, and there is no prospect of payment, send the man to one of the hospitals or dispensaries, or else

get some responsible person to stand good in writing for the bill. There is no more reason why you should pay another man's doctor bill than you should his grocery or meat bill.

The man who is prepared and competent to do emergency surgery as it should be done welcomes the proposition of the casualty companies as a God-send, and does not consider himself a worm that needs to turn.
—P.

The Indiana Medical Journal.

The extreme heat down in Hoosierdom last summer seems to have caused a fermentation in the cerebral cess-pool of the editor of the Indiana Medical Journal. The I. M. J. is an allopathic magazine, and is edited by Alembert Winthrop Brayton, M. D., known amongst a portion of the old school fraternity as "Always Whining" B., and sometimes dubbed the "Asinine Wailing" B. In one of the recent issues of the I. M. J. Brayton saw fit to read the obituary of homeopathy, Dr. Pratt and orificial surgery, and the obit. is worthy of a place in the Homeopathic Joke Book. Having personally known Brayton for nearly a quarter of a century, being cognizant of the way the world at large looks upon him, and knowing his irresponsibility, his tirade was looked upon as the mere bursting of a bubble of effluvia. Even the most sensitive of the orificialists at Chicago, against whom his venom seems directed, smiled the smile of amused pity and forgot his existence—something which most of them had not known of before.

But it seems there are those who know not Brayton, and in their blind trusting they have copied the "obituary." To these deluded souls it may be news to know that the editor of the Indiana Medical Journal is—um-m-m, well, after having written a good exposition of Brayton's weaknesses and idiosyncracies, second thought leads me to believe that the subject is not worth wasting the space on, so the copy was chucked into the waste basket. All I have to say is, "poor Brayton."—P.

People Now Live Longer.

The census bureau has recently put out its report as to mortality statistics and we quote as follows:

"The most important feature of the report is found in the decrease in the general death rate in the registration area of 1.8 per 1000 of population, a decrease of nearly 10 per cent and the decrease in the rates from the particular diseases to which the general decrease is due.

"The average age at death in 1890 was 31.1 years; in 1900 it was 35.2 years.

"The total number of deaths reported in 1900 was 1,039,094; in 1890 it was 841,419. The increase was therefore 197,675, or 23.5 per cent. As the percentage of increase in the population was but 20.7, this indicates a more complete return of deaths than in 1890.

The cities with a population above 100,000, show the following death rates for 1900 and 1890 respectively:

	1900.	1890.
Washington, D. C.	22.8	23.7
Boston	30.1	23.4
Kidney disease		83.7
Apoplexy		66.6
Cancer		60.0
Old age		54.0
Bronchitis		48.3
Cholera infantum		47.8
Debility		45.5
Inflammation of brain and meningitis		41.8
Diphtheria		34.4
Typhoid		33.8
Premature birth		33.7

Deaths from all the principal diseases show a decrease since 1890, the most notable being in consumption, which decreased 54.9 per 100,000.

From the above Minneapolitans can congratulate themselves as can the country generally.

More Beautiful American Cities.

There is nothing stereotyped or formal about the eighty-page booklet, "The Twentieth Century City," which contains the proceedings of the annual convention of the American League for Civic Improvement, held at Buffalo in August, 1901. The pamphlet bears none of those usual marks of compilation that make us skip all reports. The topics discussed are such as interest every one who cares anything at all for his home, his city or his country. The papers read were unusually practical and suggestive, and have enough variety to satisfy every one. The reader is surprised at the magnitude and scope of the work included under the term "civic improvement." The topics discussed include such as, "How a Village was Improved," "The Renaissance of Civic Beauty," "The City of the Future," "University Extension as Related to Civic Improvement," "The Cleveland Home Gardening Association," "Practical Efforts for Home Improvement," "Better Highways," "The Influence of Neighborhood Improvement Associations in the Embellishment of Cities," and

"Relation of the Exposition to the Public Beauty Movement." There is nothing of politics in any of these, but plain, practical, every day matters of home, school and society.

The speakers at the Convention were people of national prominence, and their names gave force and authority to what they said. When people like Prof. Charles Zueblin, Mr. Albert Kelsey, Hon. Charles M. Loring, Mrs. Conde Hamlin, Dr. Mathew D. Mann, Miss Mira Loyd Dock, Mr. Edwin L. Shuey, Prof. John Craig, Mayor C. E. Bolton, Mr. Starr Cadwallader, Hon. H. S. Earle, and Mr. William Scott speak upon these questions, there can be no doubt that they do so after long experience and from practical knowledge.

The illustrations of this pamphlet enforce the scope of the work and assist materially in a complete understanding of the plans proposed.

This report should be in the hands of every lover of home and civic beauty. It may be obtained by addressing The American League for Civic Improvement, Springfield, Ohio, with an enclosure of fifteen cents in stamps.

A Story With A Moral.

Under the above caption the Minneapolis Tribune in a recent issue speaks editorially so much to the point that we quote and trust that a repetition may be of value to our readers.

"The story of a successful campaign waged in Cleveland, Ohio, against smallpox without a resort to vaccination will be interesting in this city and state, in view of the talk that is being made by some of the health officers in regard to danger of a smallpox epidemic. It is stated that Cleveland has not had a case of smallpox in five months, although for two and a half years previously it was not without from 10 to 100 cases constantly. Quarantining and vaccination seemed to have no effect. Then the state health board took a hand and threatened to quarantine the city against the state unless two more pest houses were established and a more thorough vaccination crusade were conducted.

"This plan was followed for two months without producing any perceptible betterment; but in July last a new health officer was appointed—one Dr. Martin Friedrich—who at once stopped the vaccination crusade and instituted a house-to-house disinfection by sanitary officers. He and his assistants went about burning sticks of formaldehyde; he sent men to burn garbage heaps and to disinfect shops and factories and schools. A rigid quarantine of all persons exposed was established, but none was compelled to bare his arm for vaccination.

"The effect of this treatment, as we learn from a Cleveland dispatch

to the Philadelphia North American, was almost immediately noticeable. In a short time there was not a patient left in any of the pest houses. Dr. Friedrich, in explaining his position, says he is not opposed to vaccination if absolutely pure virus can be had, but that after all cleanliness and disinfection are more effective than anything else known, not only against smallpox, but against all other kinds of contagious disease.

"Speaking of the importance of absolutely pure vaccine points, he says he would never allow one to be used unless he was sure it was taken from a cow not kept in a stable; that when cows are so kept it is impossible to insure that tetanus germs will not develop in the sores on her udder. For perfect safety, the animal must be kept in a place as clean as a parlor. Tetanus is incurable, the doctor further avers, but smallpox is a comparatively easy thing to cure."

BOOKS.

PRACTICAL MEDICINE. BY F. MORTIMER LAWRENCE, A. M. M. D., Assistant in Practice of Medicine, Hahnemann Medical College: Chief of Medical Clinic, Hahnemann Dispensary, Philadelphia. Boericke and Tafel, Philadelphia. Price \$3.00; postage 25 cents.

This interesting writer wins our hearts at the outstart by his affectionate dedication of the book to his mother.

While the volume is, as the author says, intended for students and not advanced workers, it certainly is one from which all can glean something of value.

In treating of diagnosis—modern laboratory methods have been described and all in all it certainly is up to date.

The author acknowledges valuable assistance from such prominent men as Goodno, Van Linne, Bayley and Bartlett, all bright and shining lights in our school. As usual the publishers have done their work well and the volume is a credit to them.

HISTORY OF MEDICINE. BY ALEXANDER WILDER. A brief outline of Medical History and Sects of Physicians from the earliest historic period, with an extended account of the new schools of the Healing Art of the Nineteenth Century, and especially a history of the American Eclectic Practice of Medicine. New England Electric Publishing Co., New Sharon, Maine, 1901 Price, \$2.75.

This volume of nearly 1,000 pages is certainly welcome. It is readable and is not unduly biased. We welcome it, especially as a history of the Eclectic School of Practice about which we know too little.

It certainly is a volume worthy a place on all library shelves.

THE STUDY OF MATERIA MEDICA. BY CHARLES MOHR M. D. Professor of Materia Medica and Therapeutics, Hahnemann Medical College and Hospital, Philadelphia.

This is a pamphlet outlining Dr. Mohr's views as to the proper method of studying *Materia Medica* and is well worth the reading as it is a great help to the study of this most important subject.

HAY FEVER AND CATARRH OF HEAD AND NOSE WITH THEIR PREVENTIVE AND CURATIVE TREATMENT.
By E. B. FANNING, M. D., Philadelphia. Boericke and Tafel, 1901. Price, 75 cents, postage, 5 cents.

This little volume is of great value treating, as it does, of this damnable affection (we speak from experience), and any one who can help ameliorate the discomfort of a sufferer is surely worthy a halo hereafter. He ascribes the disease to an acidity of the blood and treats it homœopathically, giving the indications for various remedies as well as the proper hygienic treatment.

NEWS AND NOTES.

Dr. F. Park Lewis, of Buffalo, N. Y., is president of the board of managers of the New York State School for the Blind at Batavia.

Drs. Cora Smith Eaton, Thos. J. Gray and Henry C. Aldrich have recently purchased static machines with X-ray attachments, with which to treat their patients.

Gov. Dockery, of Missouri, an allopathic physician, and the man who as a member of congress opposed the giving of a site in Washington for the monument to Hahnemann, has just removed the homeopathic superintendent of the insane hospital at Fulton, Mo., and appointed an allopathic physician in his place, and this in spite of the fact that the expenses and death rate were lower, and percentage of recoveries higher under homeopathic management.

Dr. G. A. Robertson is health officer of Battle Creek, Mich., and also county coroner; Dr. C. D. Potter is health officer of Sturgis, Mich.; Dr. W. B. Hinsdale health officer of Ann Arbor, Mich.

The Homœopathic Hospital of Michigan University treated 1,612 patients the past year, while the allopathic hospital treated but 2,012.

Dr. Henry Gilbert is health officer of Bay City, Mich. Dr. W. A. Russell is health officer of Ludington, Mich., and Dr. D. A. MacLachlan, Detroit, is a member of the State Board of Health of Michigan.

Koch, of Berlin, is accused of plagiarizing all of his ideas about tuberculosis.

Dr. Henry C. Houghton, the well known aurist, died Dec. 1st at his home in New York City.

Dr. Francis E. Baerieke, of Baerieke & Tafel, died on Dec. 7th at his home. He leaves a widow and nine children.

Dr. W. G. Condit has removed from Chicago, Ill., to Des Moines, Iowa.

Dr. Glen R. Matchan, of Minneapolis, was married at his father's home in that city, on December 4th, to Miss Kennedy, of Adrian, Minn., and left for an extended eastern tour. The many friends of the genial doctor and his bride will join us in extending congratulations.

The grand jury of Butler county, Ohio, recently indicted two faith healers, the father and mother of a child badly burned, for manslaughter, because no treatment was given the burns other than prayer.

Dr. Abby Virginia Holmes, of Omaha, is an examiner for the Phoenix Mutual Life Ins. Co., of Hartford, Conn., and also for two fraternal insurance organizations as well as the Y. M. C. A.

Dr. Wilson A. Smith, of Chicago, has been appointed examiner for the Fidelity Mutual Insurance Co. of Philadelphia, and for the Mutual Reserve Fund Life Association.

Dr. Sara Davies, of Toledo, Ohio, is examiner for the Ladies of the Maccabees at that place.

Dr. Osker Bertelson, of Beltrami, Minn., was a recent Twin City visitor. He reports business good and that he has recently suffered from an attack of typhoid, from which he has convalesced nicely we are glad to report.

Dr. Frances McMillan, formerly of Nashville, Tenn., has removed to Mexico City, her address being Hopkins House, San Juan de La-tran 13.

Dr. Ira H. Leighton, Boulder, Mont., is surgeon to the Great Northern railway.

Dr. J. D. Zwetsch, of Gowanda, N. Y., is surgeon to the Erie railway.

Dr. Alex. Rogers, of Canton, S. D., is president of the State Board of Health.

Dr. J. M. Lee, Rochester, N. Y., is president of the New York State Homœopathic Examining Board, succeeding Dr. Asa S. Couch, of Fredonia.

Dr. P. P. Collins, formerly of Westcliffe, Colo., has formed a partnership with Dr. W. Capps, of Grand Junction, Colo.

Flower Hospital, New York City, has been bequeathed \$20,000 to endow free beds, by Susan Miln in memory of her father.

Dr. Pedro Robledo, a graduate of the University of Madrid, is the only homœopathist of Manila and the Philippine Islands.

Dr. Susan B. Hicks, of Atlanta, Georgia, was elected president of the Southern Homœopathic Association at its recent meeting.

Dr. John E. Gilman, of Chicago, reports fifty cases of cancer cured by the X-ray in the past fifteen months.

Dr. F. O. Higbee, formerly of St. Paul, has recently removed from Hinsdale, Ill., to Galien, Mich.

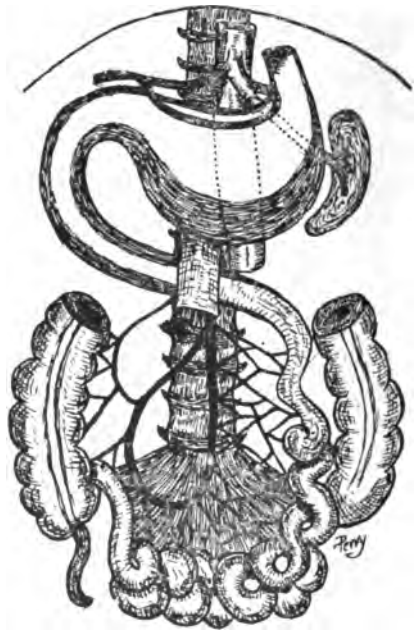
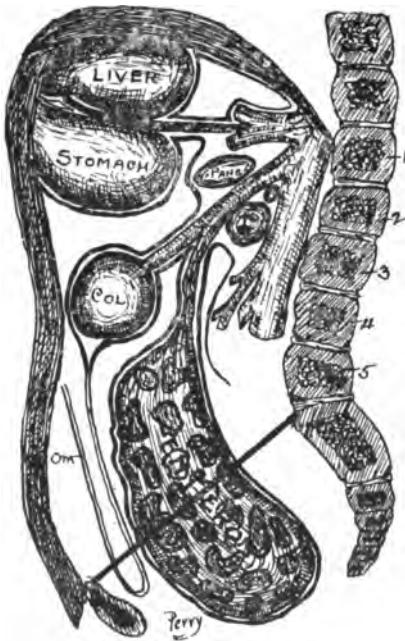
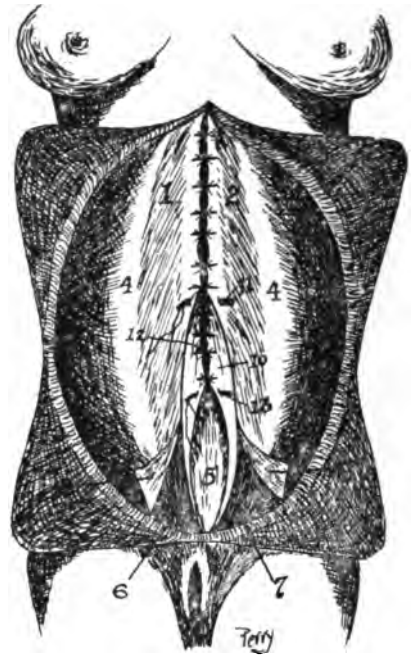
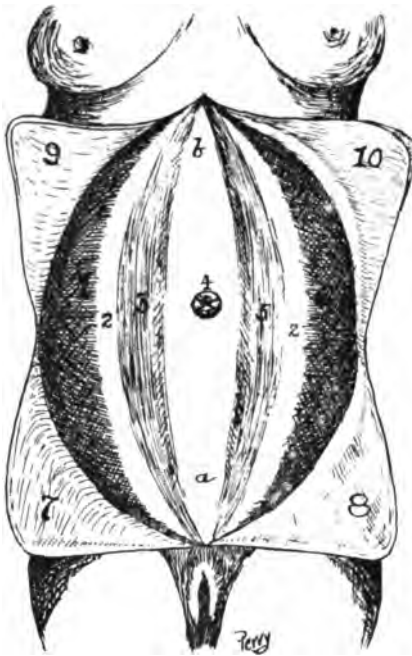
Dr. A. G. Hamilton has been appointed assistant physician in the Cook County Insane Hospital at Dunning, Ill.

Dr. F. F. Clark has located at Waupun, Wis.

Dr. H. W. Hubbard has located at Seattle, Wash.

Dr. Margaret Koch is in New York City for three months post-graduate work.

The Norfolk, Neb., Hospital for the Insane was burned on September 23rd. At this institution Drs. F. F. Teal and G. A. Young are in charge.



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Splanchnoptosis, Uterine Artery, Ureter.*

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I have no set address or paper, but I have a few points which I have worked out during many years, eight or ten years at least, and to me they are practical points and I do not doubt they will be practical to you. What I mean by practical points is that they are useful and come from original research. You may ask what is the good of original research? What is the use of it? It is to find out something that will do some good to the other fellow, to find out the uses of something which has not hitherto, perhaps, been considered as useful, as, for example, serum for diphtheria, vaccination for small pox and so on; that's what does good to the other fellow. The use of research is to relieve suffering and prolong life. I am sorry we haven't more of it in this country, but the fellow who makes research in this country has to do it usually at his own expense.

Among the few practical points I wish to present is first the matter of splanchnoptosis. What I mean by splanchnoptosis is a disease consisting of three factors. The first factor is relaxation of the abdominal walls. Here is a cut (pointing) drawn from a dead body, a woman probably fifty-five years of age, and this woman had relaxation of the abdominal walls. (Cut No. 1.) Now,, what do I mean by relaxation of the abdominal walls? I mean elongation and separation of the fascia and muscular fibres. Here it presents itself in the form of diastasis of the muscoli recti abdominales, and also elongation and separation of the fibres of the linea alba and linea semi-lunares. There you see the fascia

¹ Read before Am. Assn. Orif. Surgeons, Sept. 1901.

stretched on the side, as for example, in the dead body. Now, that puzzled me for many years, for it looked to be a hopeless affair; but when one comes to understand the facts then it begins to be clearer as to what is the best method for doing some good to the subject.

You see the linea alba here (Cut No. 1) is wide; I think it was three and a half inches in this case. In pregnant women the diastasis is often three or four inches. The linea alba here is three inches, and three and a half here (Cut No. 1) makes three more. The wall of the fascia stretched several inches; that is one important item. The muscular fibres similarly elongate and separate (diastasis).

What is the next fact to consider? The next fact to consider in the same process is this; the stretching of the fascia of the belly wall and the stretching of the muscular fibres of the belly wall result in diastasis of the recti abdominales, especially in women. When the splanchnop-totic coughs it bulges the abdomen out like a child's head.

Then, the first factor in splanchnoptosis is relaxation of the belly wall in its fascia and muscular fibres. The matter that is prominent to the practitioner in splanchnoptosis is that the recti abdominales are widely separated in the middle; anyone can see that when the patient is asked to cough.

The next factor in splanchnoptosis is distalward moving of the viscera. What causes the viscera to pass distalward? They pass distalward because of the relaxation of the abdominal walls. Why? Because the mesenteries are not made for mechanical support. The mesenteries are for purposes of conveying blood vessels, lymphatics and nerves; in other words, they should be called neuro-vascular visceral pedicles. Well, since the mesenteries are not made for mechanical support, the moment the abdominal wall gives away, distalward passes the viscera. It is astonishing to me how many long years it has been going on without investigation.

Then, the first factor in splanchnoptosis is relaxation of the abdominal walls, with elongation and separation of the fascia and muscular fibres. The second factor is distalward moving of the viscera. You can call it prolapse or enteroptosis. They are all the same thing. The third factor I have worked at for ten years. It always puzzled me to know where and how the stomach became dilated. For example, the superior mesenteric vein, artery and nerve are bound with a fibrous cord, very strong, almost as big as three fingers; a little bigger than two fingers, and it passes over the transverse segment of the duodenum. That is the method by which the mechanism takes place. It is this pressure that dilates the stomach and duodenum.

These three factors of splanchnoptosis I have worked at for ten

years. Glenard mentions some of these things. I do not know whether he was a surgeon or physician, but he did not make such application of the facts. Here is the application. You see it is useless, the usual kinds of treatment. Washing out the stomach does not do much good. It aids only temporarily. The more one of these patients stands up the worse he is. For example, he can lie on the stomach with advantage; when he turns on the side the angle mesenteric aortic gets larger; it is plain on the dead body.

Then there are three factors in splachnoptosis, absolutely three. Relaxation of the abdominal walls. This is mostly known as simple diastasis of the musculi recti abdominales. To test the condition get the patient to coughing; have her stand up, put your arms around her from behind and lift the belly up. Let go and it comes down like a sand bag. The general surgeon and practitioner; I speak of them as general, because their minds are not on one thing all the time, get hold of a mobile kidney; what is this? Nephroptosis. What do they do? Nephropexy. What is the use of doing nephropexy, when all these organs are exactly in the same state, splachnoptosis; these surgeons only recognize a partial degree of the trouble in nephroptosis—only a part of splachnoptosis.

I will take a few minutes to give illustrations and new applications. When I first investigated these things, fifteen years ago, I wondered what could be done. Opportunities arise once in a while, and in 1894 my first opportunity arose, and I did the operation which was never done before for that purpose. It had been done many times before, but not for that purpose. A woman came to me from Dr. C. Henry, of Fostoria, Ohio. She had vomited for eighteen months or two years. I made a false diagnosis. I thought she had stricture of the pylorus. She had been treated by a very honorable physician who brought her to me and said: "I want you to operate because she has stenosis of the pylorus." We opened the abdomen and found the stomach in the pelvis. I was nonplused to know what to do. There was certainly nothing the matter with the pylorus. Fortunately there were two doctors with the patient. The man to whom the patient belonged was one of the most honorable men I ever knew; in fact, he was too conscientious. He said to me, "Doctor, I want you to close that woman right up." I said, just let me alone; this woman has vomited two years; there is no use in closing her up. I am going to do gastro-enterostomy. That woman to-day is alive and well, seven years after the operation.

Gastro-enterostomy is the only possible route to save those cases from an absolutely miserable life. People with splachnoptosis are around all the time; the dead house is full of them. They do not die

altogether from splanchnoptosis, but have other diseases in connection with it which take them off rapidly.

In doing gastro-enterostomy I make a hole three inches long between the gastrum and enteron. Gastro-enterostomy is the only way to cure these patients. You can do all the washings you want to, give all the medicines or any other form of treatment, but you have got to get a channel by which they will not poison themselves. Remember, this is nothing rare. It is something that is common; sixty per cent of the multipara have splanchnoptosis.

I examine my patients on the table, and standing. I find the frequent nephroptosis and, therefore, splanchnoptosis is very common.

Now, the second operation, for example, is for stretched fascia and stretched muscular fibres until they present that gross appearance as you see here—diastasis of recti abdominales.

In 1895 Dr. O. W. MacKellar got a splanchnoptotic case in which she was pregnant, I should say four months. She had a large parovarian tumor with a seven inch pedicle allowing it to wander all over the belly. It would glide under the ribs. This woman had the most extreme diastasis recti abdominales. When she coughed the uterus would project ventrically. The exploratory abdominal incision was made and the tumor removed. We subsequently split the sheaths of the recti abdominales from the pubis to the xiphoid cartilage, enclosing the two recti abdominales in a single sheath. That brought the two recti abdominales in one sheath. That woman is well today, six years after the operation.

These were the first two operations for splanchnoptosis so far as I know, in the world. These are on record; the patients can be seen at any time. These two are perfectly well today.

Now, do not misunderstand me. These recti abdominales were sewed together, undoubtedly a hundred years ago in operations for other purposes, but not for splanchnoptosis, for the purpose of gastro-duodenal dilatation, due to pressure of the superior mesenteric artery, vein and nerve on the transverse segment of the duodenum. These two operations were very satisfactory, and the first two patients are perfectly well now, six and seven years after the operation.

The first operation for visceral ptosis was done by Dr. MacKellar and myself, and the patient is entirely well today; had her child since, and, as I said, is perfectly well. The recti abdominales are not separated. Therefore, these two operations mark a great step in the progress of means of alleviating the great numbers of people suffering with splanchnoptosis.

A great many of these patients will not let you operate. What will

you do? I have worked at this, and I have devised an instrument. I take a large abdominal binder, the usual one used for supporting the abdomen. I invented a rubber pad, made in the shape of an ax. In using this, you place the pad inside of this great binder and then blow it up like the tire of a bicycle; placing it in position, the belly rests against the rubber pad. That has proven very satisfactory, because, of course, you cannot operate upon all these patients. Drake & Drake make and sell my pneumatic rubber pad.

You may say, what harm does this splachnoptosis do, this relaxation of the belly walls and the distalward movement of the viscera? It does enormous harm, in that it compromises the circulation, kinking the intestines; compromises the circulation of the blood and lymphatics. It drags on the neuro-vascular visceral pedicles, traumatizes the nerves, deranges visceral motion, sensation, secretion and nourishment; traumatizes the nerve periphery, does immense damage. What is the treatment? Drainage. The best drain agent is normal salt solution. I would rather have that than all the medicine in the world. Drain with half normal salt solution. These women will come to you with urine the color of mahogany. Use the normal salt solution and in a week's time the urine will be as clear as spring water.

There are two great peritoneal areas. One is the absorptive and one is the exudative. If you pour say a quart of water into a dog's belly, in thirty minutes he will absorb one-tenth of his body weight. I have proven that many times. You know successful surgery has been done on the appendix because it is in the colonic region, the area of non-absorption or the exudative one. The enteronic and diaphragmatic areas are regions of rapid absorption, hence dangerous surgical areas. Seventy-five percent of peritoneal adhesions occur about the cecum, appendix and distal ilium.

Trauma and infection constitute extensive diseases. They are the chief things that disturb women during the child bearing period. Trauma produces the atria for infection. Take, for example, the kidney. Traumatize it and it will take on infection. If any young subject comes with pus in the urine, the first thing you ought to think of is stone in the kidney. Stone in the kidney will make trauma in the kidney and it will induce infection, and the pus follows from the germs which are living there, and which have not had the opportunity before to develop. If, for example, the appendix can move away from the traumatic source, it is safe, but if it gets into that source and cannot get away, it is traumatized, and infection, due to trauma of the psoas, produces appendicitis.

UTERINE ARTERY.

I have two or three applications I wish to speak of on the uterine artery. I base them on dissections and a plan I made for the genital circulation and topographical anatomy of the ureters. The arches for the genital circle were formed in the Wolffian body. One of the feet of this tripodal arch passed distalward and emerges from the internal iliac as the uterine. The other foot of the arch, which passed also distalward emerges from the external iliac on the epigastric. A third foot of the arch arises from the aorta as the ovarian. This is the tripodal arch, the arch which arose in the Wolffian body. As soon as one gets the idea of a tripodal arch it, of course, becomes at once the genital circle. This straight part of the circle is the abdominal aorta, common iliac, internal iliac, which nobody uses, but the spiral part of the circle is of use, especially from the foot of the distal arch in the internal iliac, the uterine.

One can seize that cervix with traction forceps and can draw it distalward through the vulva and inspect the genitals for disease or to ligate the arteries. The best method to understand the genitals is by the X Ray. Inject the uterus with starch and red lead. Dr. Pratt's operation was founded on the anatomical fact that the uterine artery does not lie in the myometrium, but about one-third of an inch lateral to it, and the uterus is fed by rami laterales uteri, which can be severed without dangerous hemorrhage.

Never sacrifice healthy organs. Billroth's law is to preserve all healthy tissues. The chief diseases of women are myometritis and pelvic peritoneal exudates. In my opinion, the general removal of ovaries is criminal, because ovaries are the essential sexual organs and their diseases are secondary ills. Is that too strong, Dr. Pratt?

Dr. Pratt: No, doctor. Nature destroys them first and you afterwards simply remove the ashes.

Dr. Robinson: Most removals of ovaries are criminal. The disease of the ovaries is a secondary one. It is the uterus, oviduct and peritoneum that are diseased in women, because, they are traumatized and infected during the child bearing period. Gonorrhea traumatizes and leaves atria, the way open for all the other cocci, therefore, gonorrhea is the worst disease in all the world, for it makes lesions for all kinds of diseases,—tuberculosis, streptococcus, staphylococcus.

The use of the genital circle is what? I use this circle in another new operation. There (pointing) is a circle I do not like to cut. In the early 90's I was working at the genital circle when Dr. Pratt's operation came out, and I made many dissections. Inspections of uteri under the X Ray, in the last two or three years have revealed many points. We inject with red lead and starch, then put on the X Ray and see ex-

actly where the circulation is. If you are fortunate enough to get a pregnant uterus and one immediately after delivery, inject it in situ if possible. Genitals are limited for inspection and for research everywhere. What do these injections and X Ray dissections tell you? They tell you where the circulation is; again they tell you the topography of the circulation. For example, the cervical arteries can be noted, also one can observe corporeal fundal arteries. This is very important because practically there are three bloodless zones in the uterus which are very useful in surgery. For example, the cervical artery divides dichotomously on arriving at the cervical border. The posterior vascular arm supplies the posterior cervical wall and the anterior vascular arm supplies the anterior cervical wall. This leaves an exsanguinated lateral cervical zone, which has saved millions of women in labor. For example, my arms represent the cervical arteries; coming out each side they surround the cervix by a vascular blood zone. The cervix possesses a boot jack vascular angle on each side, on each lateral border of the cervix. Now, what does that show? That explains why all women with bi-lateral lacerations do not bleed much, because bi-lateral lacerations come in the region of the bloodless zone so that we can easily see it by inspection and injection of rami laterales. There you will see the bloodless zone on the lateral border of the cervix; therefore, the bi-lateral lacerations have done women very little harm through hemorrhage. I recall one instance where the doctor in attending a woman in confinement applied forceps, tearing the cervix antero-posteriorly, the patient almost bleeding to death. When he called me I found the laceration had started at the anterior-cervix. It continued fundalward and proximalward five inches, tore off both the boot Jack vascular arms of the cervico-vaginal artery on one side and she nearly bled to death. Bi-lateral lacerations, however, are in the bloodless zone, but antero-posterior lacerations are torn in the vascular blood zone. There is also a longitudinal exsanguinated vascular zone. The uterus can be entirely bisected with but little hemorrhage and my new operation consists of bi-section of the uterus, endometrectomy with partial myomectomy.

A third exsanguinated zone is in the fundus. If you want to do a myomectomy cut transversely in the fundus and there is hardly any bleeding. I have cut out a myoma as big as three fists with hardly a drop of blood. Why? Because I struck bloodless zones.

Now one more application and that is one which I have been following for the past fifteen years. You see that the rami laterales uteri come from each side toward the center from the genital vascular circle. Longitudinally in the middle, in the center of the uterus, with the best forms of injections, one can hardly see any vessels, therefore, this is not

other than the longitudinal exsanguinated bloodless zone in which we make the central longitudinal section of the uterus. For the past year I have been splitting the uterus longitudinally, and, therefore, can look at it without any fear of bleeding. Of course, small vessels will bleed a little; then, instead of removing the whole uterus I simply do endometrectomy and remove the myometrium partially, and sew the anterior and posterior margins of each section together with sutures.

I have done about fifty of these operations. I think they will be of use because they defunctionate the uterus. If it were not for menstruation, labors and abortions gynecologists might as well quit. Traumatism and infection are always existing, therefore, all functioning women are most liable to infection. Hence these three applications: bi-lateral cervical bloodless zone, fundal bloodless zone and the central longitudinal bloodless zone. I have employed every one of them in surgery, but at one time I did not understand why these women bled so little in operations for bi-lateral lacerations of the cervix. I investigated and found that it was the bootjack vascular angle in the lateral border of the cervix which made the lateral cervical bloodless zone, the capillary bi-lateral union in the middle longitudinal axis that makes the central longitudinal exsanguinated zone and the lack of vessels in the fundus that makes the fundal exsanguinated zone.

URETER.

Now for a few points in regard to the ureter. I have been investigating the ureter with the uterine artery. There are three arterio-ureteral crossings. I have called one the distal arterio-ureteral crossing and the other the proximal arterio-ureteral crossing, while the third is the middle arterio-ureteral crossing. In investigating the ureters they should be injected with air, fluid and solids and taken with an X Ray.

The ureter consists of a duct which reaches from the ureteral pelvis to the lateral angle of the trigone. This organ is just as distinct as the kidney and its business independent. Its function is rhythm or peristalsis. It is the finest system of water works in the world, always full from kidney to urethra; if empty, contracted, if full dilated. First, take the ureteral dilatations. I call this the proximal or ureteral pelvis, the proximal dilatation. The books call it a renal pelvis. There is the middle dilatation a spindle and here is the distal dilatation a spindle. In other words, there is the ureteral pelvis, the proximal spindle and the distal spindle. If there exists dilatation, there must be sphincters. In the ureter there is the proximal constriction of sphincter, the middle constriction and the distal constriction or the sphincter. Now, I have examined all the animals I could, the cow, dog, pig, monkey, sheep, etc.,

and have found these dilatations and sphincters. Man and monkeys have them the same. There is no doubt, therefore, in my mind, that the proximal spindle is due to the erect attitude.

The ureter makes an angle and a flexure, viz: *flexura iliaca*. For example, the spindle occurs in the ureter where it is bent over the artery,—common iliac, and will make an obstruction to the urine. This obstruction from the kink dilates that spindle. That is, the proximal spindle is due to the kinking of the ureter.

What good is this knowledge? I will tell you. Calculi stop in the sphincter and stop in the strictured place. The X Ray shows that I am right. There are many more calculi in the ureter than in the kidney. For example, a woman came to my office about a month ago; had been treated ten months without experiencing any relief. I secured the X Ray and in the ureter were three little stones, stopping in the first sphincter. There was relief, of course, in an operation; however, I find massage relieves by breaking up the calculi and the remnants pass into the bladder. The pain would stop a year at a time and then come on with terrific violence again. Look out for those pains; they mean something.

There is another important point right here. Here is the ureter passing dorsal to the uterine artery in no man. In animals it passes ventral to the ureter. I have fifteen or twenty dried specimens of dogs, rabbits, guinea pigs and cats, and that ureter runs over the uterine artery. In man and monkeys the ureter runs under the uterine artery. I cannot explain that.

I forgot to tell you what this investigation shows. I used to wonder how a poor woman escaped injury to her ureters until I studied the anatomy. There is an arterio-ureteral loop. No doubt the erect attitude has developed it. This is not in lower animals, but in man and monkey. I have worked at it a long time, with the aid of the X-ray. For instance, a case of a pregnant woman who died from a criminal abortion. I refused to give the death certificate without a post mortem examination. She was, I think, ten weeks pregnant. I injected the uterus in situ as follows: With red lead on one side and vermilion and celloidin on the other side. The celloidin and vermilion failed to give an X-ray. The red lead and starch gave the most beautiful picture a man ever saw of the uterine circulation. This loop was what I was after. I am going to call that the cervical loop. It was two inches long in that pregnant woman, pregnant only ten weeks. Sometimes in order to save life, I have tied this loop. I found this loop comes well distalward. Now, then, when the cervix is drawn distalward the cervical loop simply unfolds distalward, but the ureter, with the trigone, remains

in situ; therefore, all the amateurs who have been poking their fingers in there have not tied the ureter. I see now how the ureter is not tied, because when you pull the cervix, what I call the cervical loop simply unfolds. Anybody that gets his finger in the cervical loop gets under the lateral angle of the trigone. What I call the cervical loop comes down and gives ample space of one and one-half inches.

A Case of Tubal Pregnancy.

B. H. OGDEN, A. M., M. D.,
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Gynecologist to City and County Hospital. Prof. Obstetrics University of Minn.

It is probable that most physicians will at sometime in their experience meet with cases of ectopic gestation. While this condition is comparatively rare it is not so uncommon as formerly supposed, and it behooves all of us to have firmly fixed in our minds the few generally constant symptoms which should lead us to suspect this condition. We may not be able to make a positive diagnosis from them, but when present one should never rest in fancied security with a diagnosis of threatened abortion, endometritis or salpingitis. In fifteen years of practice I have met with three cases, in all of which certain characteristic groups of symptoms were present. 1st. A delayed period of menstruation, being usually two to three weeks later than usual and during this time a sense of "soreness" or "fulness" or if distension an "indefinable sense of discomfort" through the plevix; also a feeling of fulness or a perceptible enlargement of the breasts more pronounced than is usual during the menstrual period. 2nd. The appearance of a menstrual flow two or three weeks after the usual time, the flow being less profuse and intermittent, sometimes "only a show," but continuing beyond the usual time. 3rd. Sudden attacks of intense pain "sharp," "tearing" attended with faintness.

While these three groups of symptoms may not indicate tubal pregnancy they are so characteristic that no physician should rest easy until he is satisfied that this is not their origin. The third group of symptoms are readily recognized as due to a rupture more or less complete of the tube and resulting hemorrhage. If the rupture is complete and into the abdominal cavity the pain is severe but less prolonged, the hemorrhage and shock severe and death may result in 20 to 50 hours. Whereas with partial rupture the patient may recover sufficiently to go about only to be again attacked. It is greatly to the advantage of the patient that a diagnosis of her condition should be made before the rupture occurs, but this is not often done both from the inherent difficulty of determin-

ing positively by means of the first two groups of symptoms and a physical examination, and the fact that severe pain i. e. rupture is often the first symptom which brings the patient to consult a physician. When the first two groups of symptoms exist a thorough bimanual examination under an anaesthetic, if necessary, should be made and the enlarged tube may be palpated. In my 2nd case I did this satisfactorily but the patient was unwilling to be operated upon until ten days later during which interval the tube ruptured. The loss of blood was gradual and it was several days after rupture before her weakness and general condition became so bad that she consented to a laparotomy as a last resort from which she fully recovered. My first case had a rupture into the abdominal cavity with rapid loss of blood. Laparotomy was performed within twelve hours and with the free use of normal saline hypodermoclysis her life was saved, though she was pulseless and almost exsanguinated at the time of the operation. In both of these cases as well as the third, which I will relate in detail, there was absolutely no chance of recovery without an operation and necessarily a previous correct diagnosis.

The history of my third case is so characteristic I have desired to relate it in full. Mrs. W., married 20 years, having been pregnant only once and that during the first year of married life, gives the following history: "During the past ten years I have been irregular, menstruating usually five to ten days late with a scanty flow, have never had much pain or been conscious of any uterine trouble. My last regular menstruation was on the 19th of March. My flow did not again appear until the middle of May which was later than usual and I had begun to hope I was pregnant, as my breasts were enlarging. About a week after the flow began, which was less than usual in quantity though much longer lasting, I was taken with very severe pain in the lower abdomen and fainted. I was away from home and could not return that night. The next day the pain was better and I returned home and assisted in moving to a summer cottage at Bald Eagle lake, though during this time I was very sore and could not stoop or bend without pain, and was also unusually tired. My flowing was very slight and irregular. In about a week from my first attack of pain a second attack came which was more intense and so long lasting that I sent in the morning, June 3rd, for a local physician. He thought I was having a miscarriage and gave me suppositories and hypodermic injections to relieve the pain. The pain continued very severe excepting when under the influence of the medicine. The whole abdomen became tender and swollen and I grew steadily worse until June 9th, when I sent to St. Paul for my family physician."

This was the history related when I arrived and found a woman remarkably pale, finger nails, lips and conjunctiva colorless, with sighing respiration and a weak, rapid pulse, temperature 101 4-10, abdomen very tympanitic and sensitive. Vaginal examination showed a slight bloody discharge, cervix tightly closed and a boggy feeling in the vault but on account of pain and tympanitis I could not make a satisfactory bimanual exploration. I made a diagnosis of tubal pregnancy with rupture and advised her removal at once to a hospital in St. Paul for a laparotomy. She consented and with much difficulty we made the trip. She was prepared as well as possible that night and on the morning of the 10th I opened the abdomen. Large quantities of clotted blood were washed out through the abdominal incision and the left tube was found rent from end to end. This was removed and the debris washed out with hot normal saline solution, which was extremely difficult on account of the very greatly distended condition of the bowels. The abdominal cavity was filled with the saline solution and closed without drainage in the usual manner. The peritoneum did not appear much inflamed but there was a paresis of the bowels which caused much distress and anxiety for three days following the operation. The rectal tube did not give much relief. I used insufflations of oxygen gas with some benefit, also high enemata of glycerine, turpentine and magnesia sulph in the formula known as Nobel's solution, with some benefit though the most noticeable relief was obtained from injections of pure glycerine. By these local means and the use of calomel internally this extremely annoying condition gradually disappeared and from the end of the third day on she made a steady and uneventful recovery save for the presence of from one to two degrees of fever lasting nearly two weeks, though at no time after the operation did the temperature run as high as before. This temperature was probably due to the absorption of blood clots in the abdomen which I had been unable to wash out.

I feel certain that a few more days of mistaken diagnosis and consequent inaction would have resulted fatally. There are cases of tubal pregnancy in which rupture occurs and interrupts foetal development, with the formation of a haematoma which nature in time absorbs. This is a very slow process and is often interrupted by the breaking down of the clot and the formation of an abscess. Such cases can be treated by vaginal drainage, but I believe all cases in which a diagnosis can be made before rupture or in which after rupture there is evidently considerable hemorrhage into the abdominal cavity are best treated by opening the abdomen and removing the offending material. According to some statistics about one-third of the cases of extra uterine pregnancy will recover by spontaneous cure, i. e. death of the ovum by rup-

ture of the gestation sac and absorption of its contents. But the ultimate effect of this course upon the general health of those who survive is bad, and chronic invalidism is a frequent result. In opposition to this, operation before or very soon after rupture gives a mortality of only 5 per cent and with a properly performed operation, troublesome sequellae rarely appear.

The Perry Plaster Bag.

RALPH ST. J. PERRY M. D.,
FARMINGTON, MINN.

For the benefit of some of my friends who wot not of this bag I am going to tell what it is and where you can get one made if you want one like it. Some years ago while doing factory, machine shop and railroad surgery, it was my ill fortune to be called upon to remedy many fractures. I say "ill fortune" advisedly, for I believe the doctor who is called upon to treat a broken bone is about as unfortunate now days as the person who suffers the fracture; no matter how good your result there are those who complain, and too often there are those who "neglect" to pay and even sue for damages. Having this work thrust upon me it was thought best to so prepare for it, that calls might be answered promptly and dressings applied as expeditiously as possible. This meant having at command everything likely to be needed in the treatment of any fracture, and having it in compact shape ready for instant carriage to the patient's side. Being practically wedded to the plaster paris dressing, I rely almost solely upon that method of treatment, aided by such modifications and adjuncts as emergencies may demand; and the outcome has been the "Perry Plaster Bag" as described herein.

Recent advances in the art of satchel making have caused me to discard my old style bag and adopt the new form which is here pictured. As can be seen from the cuts it is a double compartment or two story bag. The lower compartment of the bag I am now using is fitted with a zinc box in which the plaster bandages are carried, with a small amount of loose plaster. When the bag is closed this compartment is dry and practically water proof, there is no danger of the plaster spilling out and getting mixed with your tools or dressings and the heavy weight of the plaster paris always keeps the bag right side up.

In the upper compartment, which is completely shut off from the plaster paris box by a solid leather bottom or floor, are packed the tools and other paraphernalia necessary or desirable in the application of dressings and in reducing dislocations or setting bones. Long experience has taught me better than to depend upon others for even the

merest trifles in cases of emergency; they never have them, or else they are so badly "rattled" that they can't find them. As a result I carry them with me, have them when needed, and know just where to put my hand on them,—a fact which has surprised more than several persons. The second story of my bag contains:

Wide-mouthed bottle, securely corked, containing common table salt to be used in securing quick setting of plaster.

Half a dozen common roller bandages in assorted widths and lengths,—two and three inches being those most often used, with several one inch bandages for fingers and also to be used as binding strings or tapes.

One roll of surgeon's plaster. I use Mitchell's plaster in rolls six inches wide and one yard long, from which can be cut any size piece needed.

One pair good strong scissors or shears.

Several sheets of cotton wadding to be used in padding splints and filling in around bruised spots. I prefer the black wadding as it not so apt to attract the attention of busybodies to your patient's injuries.

Several black or brown stockings, children's and women's sizes. These come handy in case of arm and leg fractures where one can be used as a primary bandage in place of the customary roller bandage. In arm dressings the hand fits snugly into the foot, the thumb escaping through a slit cut in the heel; and after the plaster has hardened the end of the stocking may be opened, the fingers freed and the surplus stocking turned back over the exposed portion of the plaster bandage, thus enabling your patient to again escape the scrutiny of the cervicautchoucs. Years ago I used to have stockinet made to order for this purpose, but today cotton stockings are cheaper than having the stockinet made.

One knife for cutting plaster paris bandages. This knife is a good sized ordinary pruning knife, with the cutting edge taken off by rasping a file over it just enough to convert it into a fine irregular saw tooth edge. The one now in my bag has been in use for sixteen years and has been used in the removal of several bandages, jackets, etc.; in fact, I have never yet met the bandage I could not cut through with it just as easily as could be done with any of the high priced saws, shears or other specially designed instruments. It occasionally has to be sharpened by filing, for you cannot satisfactorily cut through plaster paris with a smooth edged knife.

A gimlet, screw driver and small screws, an awl, a chisel, a small hand saw and a reamer; all come handy in making fracture boxes, inclined planes, tinkering around splints and other apparatus which it is



THE PERRY PLASTER BAG.

sometimes necessary to use in treating compound, complicated, or certain special fractures.

One tape line for measuring limbs and any other needs that may arise.

Rubber bands; some large and strong, and others small, come in handy in securing elastic tension or extension, in holding parts of dressings in place, and for many other purposes which will suggest themselves.

Several rolls of quarter inch tape come handy in tying together bandages which have been cut open for inspection of the injured members and replaced, also as parts of extension apparatus.

A set of small pulleys and cord to aid in the reduction of dislocations.

Papers of common sharp pointed pins and safety pins, both large and small. Pins are an absolute necessity in this work and it has been only on rare occasions that a straight sharp pin could be found when wanted, and a safety pin is a minus quantity unless there is a new baby in the house. Don't forget to carry your own pins.

A paper of good needles and a spool of Barbour's flax or Clark's No. 8 thread come in handy quite often and are kept in a small tin box.

Tin braces; a half dozen strips of tin an inch wide or so by ten inches long and given a grater surface by punching holes through with an awl. These strips are woven into the weak places in the bandage as it is put upon the patient, those places subject to great strain and where the plaster is apt to break. In using always shape them to the parts underneath and always apply with the grater surface out.

Soap and razor; the former is an essential to cleansing the parts before applying any dressing, and also in lathering the surface before shaving. All skin surfaces should be shaved before applying any kind of adhesive plaster; it saves pain and profanity in subsequent removal, helps the adhesive to come off easily and goes a long way towards making the patient love you if he has had experience in taking plaster from a hairy leg.

Several pieces of one-sixteenth inch poplar veneering, twelve inches long, are not bad things to have in your bag, as they can be used in many cases as splints and supports.

Several yards of unbleached muslin, or better still several dark blue bandana handkerchiefs, to be used in making slings and in wrapping up hands or feet. If your patient be affluent use a black silk handkerchief.

A small piece of crude gutta percha is useful in many fractures of the jaw. It can be softened in hot water and moulded exactly to the

internal contour of the jaw and teeth, and when cold hardens to its given shape.

A bottle of chloroform and necessary adjuncts for its administration. [Usually carried in another bag.]

One Chicopee automatic drill is useful in drilling holes through fragments of the patella, the metacarpal, metatarsal, phalangeal and other small bones when it is necessary or desirable to wire the pieces together.

Coil of tinned iron wire and nails to be used in conjunction with the above drills.

One floor cloth three yards square, made of strong muslin or other cloth, is a handy thing to carry with you to protect carpets and floors from plaster drippings. Plaster paris spots are hard to remove, but easily prevented.

An apron which completely covers the surgeon's anterior aspect is a desirable article in protecting the clothing.

In the plaster box there is a large enameled spoon for scooping up the loose plaster.

In connection with the use of this bag there are three rules which are very essential. First, always have it well stocked; when you use all, or nearly all of any of its contents renew the supply immediately upon your return to the office or other base of supplies. Second, always keep the bag in a certain place in your office so that should you ever send a messenger for it there need be no difficulty in finding it. Third, have the bag marked or lettered in some way so that it can be easily identified by the messenger. When I tell a man to go to my office and bring me the brown satchel marked "P. B." which is under the east window, I am sure that if he has common sense and knows his alphabet he is going to bring me my plaster paris bag, and not my obstetric bag, or my major operating outfit, or my buggy medicine case, or the bag which I use for miscellaneous work.

As to the contents of the bag, they can be altered, changed, added to, or fixed up anyway to suit the user. The bag I am now using was made by the Gilbert Hand Bag Co. of Cleveland, Ohio. The zinc plaster box cost fifty cents and the tools in the second story were purchased in the open market at the usual retail prices; the total cost was about ten dollars.

I may add that the straps on this bag are plenty long enough to include any splints or other extras too large to go inside the bag and which the surgeon may desire to take with him. Also, the action between the first and second stories of the bag being telescopic, there is opportunity for carrying considerable material between the top of the plaster box

and the bottom of the upper compartment. For whittling and shaping splints if the surgeon does not carry a pocket knife one could be included in the equipment, also a small packet of absorbent cotton may be included for use in cases where there are abrasions, cuts, etc., though it should never be used for padding. So too, vaseline, antiseptic and vulnerary dressings may be added, though these are usually kept in an "emergency grip" with the instruments needed for the repair of open wounds,—which emergency grip makes another story.

The "Vaccination Certificate"

R. B. LEACH M. D.,
ST. PAUL, MINN.

The anti-vaccination propaganda at present enlivening medical research is worthy of the carefulest consideration of every logical thinker who has the good of his profession at heart, for such reform commissions usually follow some dereliction of duty upon the part of "the powers that be," and the views of those who may differ with us should receive earnest attention upon our part, for they may not only arise from minds of honestly deluded fellow citizens, whose mental perturbations are as poignant as though their beliefs were founded upon facts, but their fears, publicly expressed, may lead us who believe otherwise to make some changes in our practice; which same changes it might have been better to have effected sooner.

Purposely refraining from reviewing my own and their standpoint, statistically, I have the temerity to assert, all opposition to the contrary notwithstanding, that vaccination as oftentimes, even now, practiced is as radically wrong and almost as harmful as the most rabid anti-vaccinationist will try to make it appear to be; and yet, knowing what vaccination, properly performed, will do and what it has done for our race, I still firmly believe in and adhere to and advocate and practice such alleged, and, to me proved, preventive measure. It is therefore to be hoped, by those who have good reasons for the belief that is in them, and who believe in vaccination, per se, that the present anti-vaccination propaganda will grow instead of shrivelling for the very life of vaccination depends upon a reclamation to scientific principles, performed, and that is what can hardly be said of it as practiced, frequently, even today.

Vaccination, as we well know, is the inoculation of human beings with a specific poison with a view to protection against another, similar, specific poison, smallpox; but the application of it, properly performed, is always accompanied by more or less general as well as local disturbance, and this is known by almost everybody, and has been known by

almost everybody almost always, and yet few, if any, ever give a second thought to its dangers unless bed-ridden through their own or their physician's carelessness.

This carelessness is, in fact, principally the fault of all of the medical profession since Edward Jenner first promulgated his alleged protective against smallpox, for they have, almost from the inception of this practice, taught the populace to look upon this inoculation of apparently well persons with a specific poison as a harmless procedure. (At least if they have not said as much in just so many words, they have, by their actions, lead the people to infer as much.) This has naturally, I think, lead the populace to disregard almost all the ordinary rules of hygiene and sanitation and even of common-sense, so that the average vaccinated individual has gone about his daily vocation with little or no thought of how such might affect his future welfare. There is not another similar proceedure known amongst medical men where less of the ordinary, good old-fashioned common-sense prevails. We are vaccinated and if it don't "take" we congratulate ourselves that, probably, we would not, if exposed, "take" smallpox. We feel that we are protected. While, if it does "take," we hardly ever do more than "keep the other fellow off" when it hurts most, or, when the scab is falling off or has just fallen off we, possibly, wrap the sore arm or leg with an extra old cloth of some sort ("it don't matter much what") "just to keep from taking cold." Whose fault, if not the physicians' of all times since Jenner, that our patients have paid so little attention to their own welfare?

Physicians, many of them, who usually make much of the technique in other operations, often fail to take the simplest of precautions before, during or after, vaccinations. They frequently forget to instruct their patients that "at such and such a time" they will doubtless become sick "in such and such a way," and that at such time they should assist nature in perfecting prophylaxis by rest in a recumbent posture or otherwise help to facilitate circulation and enhance their own comfort, and under no circumstances to use anything not absolutely aseptic as a protective covering for the sore.

It appears to me that physicians are more to blame for failing to properly and timely instruct their patients, and thus by omission to apparently make light of this practice, than they are to blame for contamination of their patients through the use of septic or dirty instruments. Many physicians, in fact too many, have been in the habit of making a charge of one dollar for vaccinations, just as if their work really was something, and then spoiling it all through failure to provide against contingencies which, if the procedure is any good at all, are bound to arise and to cause suffering and more or less loss of time. This is a

great mistake and, almost alone, has led to the uprisings of the people who have not received what vaccination, when completely performed, can give them, and has led to much that vaccination, per se, completely practiced, will not give them.

We well remember that only in the recent past many physicians made the mistake of overdoing even cleanliness in their vaccinations by applying, just before operating, one or more of the most powerful of antiseptics and then inserting, even while their antiseptics are still moist and active, their prophylactic matter, which, if their antiseptics was at all potent, was at once nullified, or, if their antiseptic was not potent, their vaccine was handicapped by having been adulterated, more or less, by admixture with something entirely foreign to it and irrelevant to scientific remedial protection.

In other words, these men put on the arm or leg something they believed to be germicidal or which they believed would counteract other septic matter, and forgot that vaccine virus, if anything at all, is a septic matter of pronounced degree; and after such practice many were often not a little surprised that their vaccinations didn't "take" and, I doubt not, wrote their vaccine makers to this effect.

Such was the extent to which many otherwise sound reasoners were carried by the antiseptic craze which swept the medical world not so very long ago but which same craze, thanks to other and more searching observers, led to the discovery and practice of asepsis or cleanliness, with freedom from "antis."

Again, more than one otherwise careful physician, after taking every kind of wise immediate precaution and doing his immediate manual work well and scientifically, has failed to instruct or failed to obtain co-operation upon the part of his patient (who has more than once been known to wrap a sore, bleeding arm or leg in an old and even soiled pocket handkerchief) and, failing to obtain expected results, but getting unexpected results, has condemned a practice he has not wholly appreciated. This kind of unfortunate is not long becoming one of the "leading lights" among the "anti-vaccinationists."

The whole trouble lies in the fact that the people have been taught, for generation, that vaccination is a simple thing; is really nothing; while, in fact, vaccination is not a simple thing, but, to the contrary, it is the purposeful and premeditated (scientifically and statistically reinforced) inoculation of supposedly well human beings with a poison, for the specific purpose of preventing smallpox in the vaccinated. To obtain the object of this voluntary or compulsory poisoning for prophylatic purposes, scientific principles and practice should obtain and the vaccinated should receive, until the sore heals (and that means the healing subsequent to

the falling of the scab), the carefulest consideration of a resourceful medical attendant who should be (though he seldom is) consulted and should combat everything not the logical sequence of this practice.

Vaccination is not to be fooled with. No scientific problem is. And vaccination, per se, is as logical and as truly scientific and as truly protective against its similitum, smallpox, as any similar problem in medicine. But its application should exact attention, and the recent propaganda against this practice is but the logical sequence of neglect by somebody somewhere, and this same propaganda will prove to be its own curative as it cures present disregard of principles governing cleanliness and common-sense.

Over a century ago, Hahnemann said of vaccination that: "It is well known that when variola is added to cowpox, the former, by virtue of its superior intensity as well as its great similitude, will at once extinguish the latter HOMOEOPATHICALLY, and arrest its development. Cowpox, on the other hand, having nearly attained its period of perfection, will, by its similitude, lessen to a great degree the virulence and danger of a subsequent eruption of smallpox."

Vaccination WILL protect the vaccinated against smallpox, and, in the minds of unbiased thinkers, it has already so modified the whole human race (the practice being almost universal) as to have apparently changed the old-fashioned smallpox so that it now appears as almost something new. Smallpox, per se, has not changed (as is to be seen in the contaminated unvaccinated), but the race itself, through this almost universal practice of vaccination, is changed and all of the dire calamities today alleged against vaccination are not the result of vaccination, per se, but of uncleanness by somebody some where, yet an early return and rigid adherence to truly aseptic precautions previous to and all through the period of vaccination will entirely remove all cause for further opposition to this practice. Until this is accomplished, however, anti-vaccinationists should be encouraged; and if these precautions can not become general, by patient as well as by physician, the sooner the "antis" get on top and stay there, the better for all concerned. And yet even the "antis" should "fight in the open" and not, like one Dr. C. W. Amerige (author of "Vaccination: A Curse"), go away back behind the returns and quote us the old practice of "arm-to-arm" vaccination and blame twentieth century physicians for practicing something having the same name but not in any sense the illogical, unscientific and disease-breeding properties of the earlier vaccinations. It's sad enough to have to admit present faults without having to bear the blame of antecedents also.

The populace can be scientifically protected against smallpox but

they must add their mite toward the success of the operation by using more carefulness than usual in the past and physicians can add to the future success of this operation, also, by ceasing to pooh-pooh at the fears of any trouble arising from vaccination and by timely instructions to their patients and by practicing a more truly scientific aseptic prophylaxis; when, the "antis," with their jobs gone, will stop their at present not entirely untimely complaints.

There was a time when it was handy and probably truthful to a great extent to lay much of the fault for unsuccessful vaccinations at the door of the vaccine farm owners, but post-vaccinal complications can no longer be excused in this way, for now the animals used for the reproduction of the vaccine lymph, after the virus is removed and labelled and layed away, are killed and their blood and other tissues regularly bacteriologically examined and scientifically adjudged physiologic or pathologic, and if the latter, the whole of the product of that animal and the carcass of the animal itself are destroyed. Thus the problem again resolves itself back to first principles, viz.: the carelessness of some one somewhere, before, during and after vaccination.

As to the protest going the rounds of the country against submitting to the law compelling vaccination or absence from our public schools, I, personally, feel that this is as just as any similar quarantine measure (which implies isolation of the few for the benefit of the many), yet the law, as it stands (i. e., is being enforced), is not equitable and should be amended. I believe that I can best make my meaning better understood in this way: At "any old time," to use language a little more forceful than elegant, we physicians are called upon to vaccinate prospective public school pupils, and, usually, this occurs on the evening of the first day of school. At this time, after any, whether vaccinated or unvaccinated, who may have been exposed to smallpox themselves, even though themselves unaware of it, had sat all day in school with others, possibly unprotected, these children present themselves for vaccination. They are armed with the regulation "vaccination certificate" and request us to vaccinate them and sign their certificate to that effect and, as the law now stands, these certificates, but an hour or a few hours old, entitles the bearer to enrollment in our public schools.

We perform our part, in many instances, as any physician well knows, do not again see these little ones. We don't know whether they are vaccinated as they should be, we don't know whether it "took" or not, we don't know whether they are in any sense protected as vaccination, properly performed, will protect. All we know is that we performed the manual part of the practice and, as we should always do, gave instructions to return if it didn't "take," and that we signed the certificates.

Now, what good, may I ask, is such "vaccination," if it didn't "take?" What kind of protection is it to the inoculated?

These parties hold certificates, however, that on such and such day I "vaccinated" them and, as the law now reads or is generally interpreted, these certificates entitle bearers to enrollment as public school pupils; yet what kind of protection against smallpox is there in a certificate without the accompanying proper kind of scar? This really seems but protection against expulsion from the public schools and hardly belongs to the domain of "State Medicine."

Vaccination practiced in this way (or, rather, certificates of vaccination, alone, being accepted as proof of vaccination, which may never have "taken") is less than half protection against smallpox. If this kind of "protection" is permissible (and it seems to have been, if it is not now) then what law would sustain a health officer demanding that a child without such certificate shall leave a school only to return bearing this sacred slip? And if such "vaccinated" one does return and does present such a "certificate of vaccination," yet has no proper mark of a successful vaccination, what kind of protection is offered himself or others? And if such a child should return even with a scar how many of our public school teachers are trained to differentiate the vaccine from the ulcer scar? Yet health officers not many thousands of miles from here, after denouncing the certificate unaccompanied by the scar, have left the judgment of the latter to those who, themselves, have acknowledged their ignorance of same.

This is not vaccination. This is playing with fire. This is not fair play to anybody, and I, personally, don't believe that the present vaccination law, which should be the very best in the land, will withstand any kind of legal contest. If vaccination is scientific and truly protective against smallpox, and I firmly believe that it is, and a certain and specific kind of scar (well known to the profession) is the proper and only proof that the bearer is himself or herself properly protected against smallpox, and hence, in himself or herself, not a menace to anybody else, then not even a "certificate of vaccination" from the health commissioner himself, without such a scar, should gain admission for any child into our public schools.

The present kind of vaccination practice and law will sooner or later (and, if not changed, the sooner the better) prove a boomerang which will make null and void the best intentioned of quarantine laws.

Practice aseptic vaccination and amend the vaccination law until it will withstand all contest and then pay especial attention to the poor and needy, the nomads, so to speak, who crowd into every large city, for these are they who, through environment, are almost more than any

others likely to suffer with contagious maladies and who, more than anybody else, spread such contagions.

If nothing better than the present practice and law is offered, and offered soon, the anti-vaccinationists will surely win out, and, with nothing better to offer, they certainly should win.

The Chemistry and Dietetic Value of Eggs.

DR. E. V. PARROTT.

Eggs have become such a staple in all civilized dietaries that a little more careful study of their composition and nutritive qualities is quite in place. They are eaten in all the countries of the globe, and are prepared in a greater variety of ways than almost any other item of human food. There are almost endless varieties of eggs, although the market quotations, unless otherwise specified, refer exclusively to eggs produced by domestic fowls, in common parlance, hens' eggs.

The other varieties more or less used are the eggs of ducks, geese, guinea-fowls, and turkeys in domestic line, to which may be added a long list of the eggs of wild birds, including those of plover, gulls, terns, herons, and murre. (Mare's eggs have never been analyzed!)

Eggs other than birds' eggs have also been more or less extensively used in various tribes, such as turtle and terrapin eggs, fish eggs, as the sturgeon (caviar), sterlet, sevruga, beluga, shad, etc., also to some extent the eggs of alligators, lizards, serpents, and some species of insects. Fish eggs are somewhat extensively used in the preparation of artificial foods for infants and invalids.

Referring to the eggs of birds there are two distinct varieties, and these differ materially in composition. In one variety the young resulting from the process of incubation are hatched full-fledged and ready within a few hours to hustle for themselves and scratch a living. Ordinary domestic fowls are an example of this variety. Quails, partridges and prairie chickens also belong to this group. The other variety includes the birds, buzzards, crows, etc. The young of these are hatched in a helpless and unfledged state, and must be cared for by their parents for some time, or perish.

The eggs of the first variety should inferentially contain more nutritive elements than those of the second, and careful chemical analyses have determined that this is the case. Inferentially, the egg must contain all the elements of nutrition required for the evolution and maintenance of the young bird, and that it meets this requirement is conclusively proved by the everyday facts of natural history.

Writers on the subject of dietetics frequently refer to this fact as conclusive evidence that eggs furnish a perfect food for animal life at all

stages. The same claim is made for milk, because it supplies perfect nourishment for young animals. The inference is not warranted. The mature organism develops needs that do not exist in the embryo. This is easily proved by the history of the chick, which would suffer in later life if restricted to the eggs of its own kind as food.

The composition of the various kinds of domestic eggs, as of the hen, duck, goose, turkey, and guinea-fowl, does not vary materially. Those of the hen and turkey contain a little more water and a little less fat than those of the duck, goose, and guinea-fowl. Seventy-four per cent of the substance of hens' eggs is water. In other varieties named it is three to five per cent less. The hen's egg contains nine per cent of fat, as against twelve per cent in the eggs of the duck, goose, and turkey. In the proteid element hens' eggs contain twelve per cent, ducks' the same, with eggs of the goose, turkey and guinea-fowl about one and one-half per cent higher. In fuel value, variation is in accord with the proportion of fat contained. The hen's egg stands 720 calories per pound; duck, 860; goose, 865; guinea fowl, 755.

As compared with other articles of food, eggs contain on an average four per cent less protein and six per cent less fat than sirloin steak, half as much protein and one-third as much fat as cream cheese, and twice as much protein, with ten times as much fat, as oysters. Their value is about two-thirds that of beef, and but one-third that of good cheese. Compared with wheat flour, eggs contain as much fat, but less than half as much fuel value. Eggs contain practically no carbohydrates, while wheat flour contains 75 per cent.

Chemically speaking, therefore, eggs are rich in building and repair material, but do not furnish a proportionate percentage of energy. This is why it is now admitted that eggs do not furnish perfect nutrition for the adult body. It must, however, be remembered that nature endows the digestive organs with a considerable degree of vital discretion, or power of transformation; so that both proteids and carbohydrates are to a certain extent commuted into energy, and vice versa. The animal or earthly elements of the egg and its fat are found in the yolk.

It is a popular notion that the eggs of different breeds of hens vary in both flavor and nutritive qualities; but the chemists do not find that this idea is based on fact. The white-shelled eggs of the Leghorns and Minorcas have practically the same composition as the brown-shelled ones of the Cochins, Brahmas, and Plymouth Rocks.

The white of eggs is generally assumed to be pure albumen. Technically speaking, it consists of two albumens—ovalbumen and conalbumen, ovomucin and ovomucoid. There is a trace of phosphorus, and the ash yields sodium chlorid.

The yolk contains a number of different bodies, including palmitin (20 per cent), vitellin (15 per cent), stearin, olein, lecithin, nuclein, etc., and a small per cent of coloring matter. The contained phosphorus amounts to one per cent of phosphoric acid, in addition to which are found various chemical compounds of calcium, magnesium, potassium, and iron. Sulphur is another constituent, the formation of silver sulphide causing the discoloration of silver spoons used in connection with the cooking of eggs. The decomposition of eggs causes the liberation of hydrogen sulphide and phosphoretted hydrogen, to which gases the rank odor is attributable.

Eggs "spoil" or rot through the action of micro-organisms, which, like mold-spores, are everywhere abundant, and which gain access to the egg through the minute pores in the shell. Some of the egg-preservatives act by simply closing these pores against the organisms. Sodium silicate, or soluble glass, common tallow, paraffin, and various varnishes, have been used, and the process is effective if properly done and done in time. It usually fails, for the reason that it is not done before the egg has already become infected.

The flavor of eggs varies quite decidedly, first according to the kind of food supplied to the hen. The best flavored eggs result from feeding carbonaceous, and the poorest from highly nitrogenous foods.

Grains and green clover—hens requiring a considerable proportion of green food in order to do well—give the best flavored eggs.

The digestibility of eggs is about the same whether raw, lightly cooked, or thoroughly cooked. This will seem incredible to those who have always been accustomed to insisting upon their eggs being "soft-boiled," or lightly cooked. Digestibility, however, does not imply so much the rapidity with which the food leaves the stomach as the completeness of its absorbability and appropriation by the system. Careful experiments in this country and abroad have demonstrated that a healthy stomach digests a hard-boiled egg quite as thoroughly as a soft-boiled one; but this does not prove that the process is as quickly accomplished, or that the hard-boiled egg does not compel a somewhat greater effort on the part of the digestive organs. With healthy persons the degree of cooking may therefore be made wholly a matter of taste. In case of invalids and debilitated digestive organs the question becomes of more importance, and must be determined by the physician, or by individual peculiarities.

In case of the yolk of eggs there is no difference in the digestibility of one that is hard and one that is soft-cooked. And in case of the white of eggs, when this is hard-boiled its slowness of digestion is undoubtedly due more to the fact that it is imperfectly masticated than to the effect

of heat on the albumen. There is, however, a considerable difference in the solubility and assimilability of albumen as coagulated quickly, at high temperatures, or more slowly, at moderate temperature. The white of an egg may be perfectly coagulated in water at from 160° to 185° F., if submerged in it for ten minutes or more; in which case it will not be so firm, or "tough," as when coagulated in three or four minutes, at a temperature of 212°.

Eggs are a wholesome and economic form of human food, supplying a desirable substitute for flesh. As to comparative cost, eggs are as cheap at 35 cents per dozen as beefsteak at 20 cents per pound.

Minnesota Sanitary Conference

HENRY HUTCHINSON, M. D.

Vice-President Minnesota State Board of Health.
ST. PAUL, MINNESOTA.

For a long time the State Board of Health has realized the necessity for some kind of a sanitary organization in this state that would bring the local health officers into closer touch with the work and aims of the state board. After considerable discussion at the quarterly meetings of the board and still more discussion by its executive committee and officers, it was decided to invite the county and township health officers and others interested in public sanitation to a conference.

The date of this conference was set for Tuesday and Wednesday, January 14 and 15th. This date was selected on account of its being the time for the regular annual meeting of the State Board of Health, in order that its members might attend both meetings. On the morning of Tuesday, the 14th, a brief session of the state board was held at the secretary's office for transacting such business as was imperatively necessary, and the board then adjourned to meet with the sanitary conference at the Capitol, 2:30 p. m.

In the absence of the president of the board, your correspondent being its vice-president, called the meeting to order. Dr. H. M. Bracken acting as secretary.

The number present was not as large as the officers of the state board had hoped; some seventy-five physicians, health officers and others interested in public sanitation responded to our invitation, these mainly from outside the two cities.

After the appointment of a committee on permanent organization, the regular program, as arranged by the officers of the state board, was opened by Dr. J. M. Robinson, of Duluth, in an able and interesting paper on typhoid fever.

Mr. Geo. L. Wilson, assistant city engineer of St. Paul, read a paper on sewage disposal, in which the subject was treated in a scientific as well as a practical manner. Prof. J. J. Flathers came next with an excellent paper on "The Water Supply in Minnesota." These papers were in turn discussed, and at 5:30 p. m. the meeting adjourned for dinner at the Commercial Club.

The evening session of the conference was opened at 8 o'clock, by the chairman introducing Governor S. R. Van Sant, who welcomed the conference and wished it success in one of his happy and characteristic talks.

Dr. Franklyn Staples, of Winona, president of the State Board of Health, on account of ill-health, was unable to be present, but sent an interesting address on the "History of Public Hygiene and Sanitation" in this state, which was read and listened to with much interest. Dr. Charles L. Greene, of St. Paul, read a paper on "Tuberculosis," while Dr. H. Longstreet Taylor followed with a paper on "The Care of Tuberculosis in Sanitation." Both papers were listened to with marked attention and were well received.

Prof. H. L. Russell, bacteriologist for the University of Wisconsin, gave an exceedingly interesting extemporaneous discussion on "Bovine Tuberculosis in its Relation to Public Health."

These papers and their discussion filled the time until 10:30, when the conference adjourned to meet at the State Bacteriological Station on the University campus at 9:30 the following morning. January 15th, 9:30 a. m.—After an address of welcome by President Cyrus Northrup, of the State University, Dr. J. A. Adair, of Owatonna, gave an extemporaneous discussion of "The Diagnosis of Diphtheria, Clinical and Bacteriological," which was listened to with marked interest, the further discussion of which was well supported by Prof. F. E. Wesbrook, bacteriologist of the State Board of Health, by Dr. P. M. Hall, health officer of Minneapolis, and others.

Rabies was treated of by Dr. Arthur Sweeney, of St. Paul, and the "Present Epidemic of Smallpox" by Dr. H. M. Bracken, both of these topics provoked animated and interesting discussion. After lunching at the Minneapolis Commercial Club, the meeting again convened at the Hennepin County Medical Society rooms. Dr. P. M. Hall read a paper on "The Present Status of Garbage Disposal in Minnesota." After the discussion of this paper the committee on permanent organization made its report, the election of officers for the ensuing year took place and the meeting adjourned. Thus ended one of the most interesting and instructive sanitary meetings it has been our fortune to attend and the results bids fair to be of great benefit to the cause of sanitation throughout this state.

A permanent organization has been effected and the machinery set in operation which will without doubt tend to the promotion and extension of better sanitation among the people generally.

The proper quarantining of contagious diseases of men and animals and the best methods for disinfecting the premises where such diseases have existed and a better appreciation of the benefits from vaccination, are matters that will be urged by this association.

MINNEAPOLIS HOMOEOPATHIC MAGAZINE.

EDITORS.

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EDITORIAL.

An Error.

In his article on "Diagnosis by Intuition," in the January issue, Dr. Perry was made to say that he does not believe in such a thing. This the doctor wants corrected, as he is a firm believer in diagnosis by intuition and ask all readers of the Magazine to kindly eradicate the word "not" in the eighth line on page 1 of the January number—it is a lapsus linotypæ or two.

Anent Dr. Perry's editorial remarks last month on the payment for the first visit by casualty companies, there comes to hand the details of a case where a local surgeon was summoned to attend a man who had fallen from the a building. The surgeon went prepared for the work to be done, stuck to his patient until the work was done (a trephining), the casualty company paid for the first visit and as a result the surgeon is jingling three hundred dollars in his pocket. Two other surgeons who assisted in the operation are also doing a little jingling to the tune of fifty dollars each.

Sugar-Eating People.

The sugar crop of the world amounts in a normal year to about 8,000,000 tons, of which the larger part, about 4,500,000 tons, comes from beets, and the balance, 3,500,000 tons, from sugar-cane. Of the latter the largest proportion comes from the West Indies, and a large amount

from the island of Java. Among the countries which produce beet-sugar Germany comes first, with about one-third of the world's crop. Then Austria, with about as much, and then France, Russia, and Belgium and Holland together, with substantially the same quantity.

In respect to the production of beet-sugar in the United States there has been a vast increase since the establishment of the McKinley tariff in 1890, says the New York Sun. The year previous the product was 2,800 tons. Two years later it was 12,000. Four years later it was 20,000 tons. Last year it was 43,000 tons, and the product is on the increase. The McKinley tariff established, between July 1, 1891, and July 1, 1895, a bounty to be paid by the United States government to sugar producers, with a view to stimulating the industry and compensating those engaged in it for the changes made in the duty upon imported sugar.

Among scientists the opinion has been general that a moderate amount of sugar, like a moderate amount of salt, should enter into the dietary of the people of each nation, but it is only when the figures of the consumption of sugar are examined that it is seen that the quantity consumed varies radically; and it is a curious fact that in those countries in which the maritime spirit—the spirit of navigation, commerce, travel, and colonization—is strong there is a very considerable consumption of sugar per capita, whereas in those countries in which these qualities are not predominant among the inhabitants the consumption is smaller. In England, first among the maritime nations of the world, the consumption of sugar is eighty-five pounds a year for each inhabitant. In Denmark it is forty-five, in Holland thirty-one, in France thirty, and in Norway and Sweden twenty-five, whereas in Russia it is only ten, in Italy seven, in Turkey seven, in Greece six, and in Servia four. The consumption of sugar seems to have very little connection with or relation to the production of sugar, for in Austria, the sugar product of which is large, the average consumption is only nineteen pounds, while in Switzerland, in which there is no production to speak of, it is forty-four. And another curious phase of the matter is that there is a great disparity in the consumption of sugar in the two tea-drinking countries—England and Russia. The large amount of sugar consumed in France is attributed, in part, to the fact that French confectioners and candy makers, and more especially those doing business in the city of Paris, use in their trade enormous quantities of sugar in a year, adding abnormally to the average consumption of sugar in the French republic.—St. Louis Republic.

University of Minnesota.

The College of Homeopathic Medicine and Surgery, while it is one of the smallest, also is one of the most successful departments of the

University. In 1886 a private school, known as the Minnesota Homeopathic Medical College was started at Fourth avenue and Twenty-fourth street south. Its success was such that after two years it became necessary to enlarge its scope and it was then made a part of the medical department of the University. For the first five years the College of Homeopathy was under the direction of Dean Brazie. He retired, however, in 1893, and Dr. Williamson, the present Dean, took the position and has since looked after the interests of the college. Dean Williamson is an enthusiastic believer in homeopathy and is confident that the College has a good future before it.

The number of students in this department has never been large, the largest enrollment for any one year having been 35, this in 1896. The present year opened with an enrollment of 20. The success of an institution, however, is not to be judged so much by the number of students, as by the quality of work done and the success of its graduates.

During the last 12 years 75 students have been graduated from this department, all of whom have since kept in close touch with their alma mater, and Dean Williamson points with pride to the fact that they have all without exception, met with unqualified success. This is significant in view of the fact that the best that other colleges can show is 80 per cent of successful alumni.

The faculty list embraces 16 instructors, besides those who teach branches in common with the old school of medicine. Laboratories are used in common and offer equipment second to none. The aim of the faculty is to bring the students into the closest possible relation with the instructors and patients and to give each one personal attention, which is made possible by the smallness of the classes. In the Junior and Senior years each student becomes the personal and sole assistant of the instructor in all clinical work. This is of course of untold advantage to the student, as is seen by their success in practice.

Two hours every day are devoted to clinics, at the dispensary, where patients present themselves in large numbers—more than 6,000 prescriptions having been made during the past year. The hospitals of both cities are also open to the students.

Homeopathy is growing in favor, and the thoroughness of the course offered in this department has given it a very high standing in the medical world, which Dean Williamson assures us will be maintained and strengthened as the college grows older, and this course becomes better known and more popular among those who aspire to the M. D. profession.—*Minnesota Daily*.

Signs of Death.

In doubtful cases, better try all of them.

1. Tie a string firmly about the finger. If the digit becomes red or tumefied, life is not extinct.
2. Insert a bright steel needle into the flesh. If, after the lapse of thirty minutes, it shows tarnish from oxidation, life is not extinct.
3. Inject a few drops of liquor ammonia under the skin. During life a deep red or purple spot is formed at site of injection.
4. Drop atropin into the eye. During life the pupil will dilate.
5. Look at sun or any bright light through the fingers held closely together. During life a pink tinge will show along each finger; after death, only a dull white.
6. After death a dark spot is said to form gradually on the outer side of the white of the eye, due to the drying of the sclerotic so that the darker choroid shows through.
7. Hold flame of candle to tip of finger or toe. In life a water-filled blister will form; after death, only a drying of the skin; or if the skin becomes elevated above underlying tissues the elevation will contain gas instead of water.
8. Hold mirror close to mouth and nostrils for some time; if any moisture appears, life is present.
9. Putrefaction is an absolute sign of death. Better delay for the evidence of its commencing than run any risk of burying alive.

Just now there is much agitation, political and international, over the commercial values of certain canal routes. Let us medical men not lose sight of the fact that the canal which has been of the greatest commercial value to use has been the urethral canal.—P.

Dr. J. Rickey Horner has charge of the college reunion feature of the coming meeting of the A. T. H., at Cleveland next June, and proposes that each homeopathic college establish headquarters where the alumni can get together and renew old acquaintance. I would suggest that another headquarters be established where those who have "flopped over" from the allopathic school can meet and compare experiences. Quite a large percentage of the followers of Hohnemann are converts from the doctrines of the dominant school.—P.

At its December meeting the Englewood Homœopathic Medical Society saw fit to reprimand one of its members, Prof. Gilman, because his name had been used in a newspaper article as advocating the X-ray treatment of cancer, the society taking the ground that such matters should

first be made public through the medical press. As a physician, a newspaperman and a medical journalist of over twenty years' experience in many phases and in many parts of the world, it has been my observation that the medical press is most notoriously slow in giving publicity to valuable medical or surgical discoveries, and that this publicity does not include the general public who are most in need of the benefit to be derived. My experience is that these matters will be made public through the newspapers in spite of the doctors and that it is best to have their publication supervised by a competent medical man, whose name and reputation is a sufficient guaranty to the public that the published matter is reliable. Dr. Gilman should have been complimented, instead of reprimanded.—P.

NEWS AND NOTES.

Alexander Rogers, Canton, S. D., is president of the State Board of Health.

The homeopathic members of the Louisiana Medical Examining Board are Drs. C. R. Mayer, G. Aiken, and John T. Creblin.

Dr. E. B. Taylor, of Burlington, Wis., was married Nov. 21st last to Miss Lulu McDonald, of Rochester, Wis.

Dr. F. E. Downey, of Clinton, Ill., for many years treasurer of the Illinois State Society and its president in 1901, died Jan. 5th from an attack of acute cholelithiasis.

The latest candidate for journalistic honors is the *Homeopathic Journal of Pediatrics* published in Buffalo, N. Y. Dr. J. D. Chadwick being the editor. We would be pleased to exchange.

Dr. Sarah A. Smith, of Council Bluffs, Ia., died Dec. 23rd.

Dr. Elmer E. Rice, of Hot Springs, S. D., has been visiting the hospitals in Chicago recently.

Dr. B. M. Rhinehart, of Hardy, Ia., was married on New Year's day to Esther M. Stone, of Chicago.

Dr. F. A. Walters has returned to Steven's Point from Wausau, Wis.

Dr. W. A. Hazelton, formerly at Baraboo, has located at Wausau, Wis.

Cleveland, Ohio, has a new smallpox ward in its city hospital with 80 ward beds and eight private rooms.

The January number of the *North American Journal of Homeopathy* is a Jubilee number, celebrating its fiftieth anniversary, and it is a credit to its worthy editor Dr. Eug. H. Porter.

Dr. J. M. Lee is president of the New York State Board of Homeopathic Medical Examiners.

Dr. J. H. Drake, of Des Moines, Ia., has had the misfortune to fracture the patella of the left knee, but is convalescing we are happy to announce.

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Pubic Symphysiotomy.

R. R. ROME, M. D.,

MINNEAPOLIS, MINN.

Pubic Symphysiotomy.—This word is derived from the two Greek words, symphysis meaning a joint, and tomy, to cut. The practical definition, however is this—symphysiotomy is the dividing of the pubic joint with a consequent separating of the pubic rami for the purpose of facilitating delivery.

A few words as regards the history of this operation will be interesting. Two post-mortem sections were performed for the purpose of saving the lives of the children, one in 1644 by Claude Caurvee, a French physician practicing in Poland. The other in 1766 by Joseph Planke, a physician practicing in Hungaria.

But the real merit of placing this operation before the medical and scientific world is due to Jean Devi Segault, who, while a student of medicine in Paris, made original researches along this line and placed the product of his labor before the Academy of Medicine of Paris. This august body, however, turned it down, considering it merely a morbid product of the dissection room. Nevertheless Segault made it the subject of his graduation thesis, and kept on the alert for an opportunity to put the theory to the test. It came, as it was bound to come to a mind of his quality, and on Oct. 1, 1777, he made his initial operation upon a dwarf 3 ft. and 8 in. in height, conjugate diameter $2\frac{3}{4}$ inches, and a biparietal diameter of the foetal head of a little over 3 inches. This was her fifth pregnancy and the four previous children had been sacrificed. This was a signal success, both mother and child were saved. The mother suffering subsequently from a vesico-vaginal fistula, undoubtedly

caused by the pinching of the tissues when the rami were brought together. The success of this operation set the medical mind on fire and women were operated upon for all kinds of obstructions, and Segault himself became so enthusiastic that he claimed it a universal substitute for Caesarean section. The latter operation at that time meant almost certain death to the mother, mortality being 99 out of a hundred.

Symphysiotomy enjoyed a brief period of glorification and then in turn it was laid on the shelf, labeled a surgical curiosity, and there it laid until 1866, when Prof. Morisoni, of Naples, editor of a medical magazine, took it down, dusted it off and served it as a dessert to the medical epicureans of this time, until 1893, when it was imported into this country, where it has taken out a lease of life and is now enjoying liberty "in the land of the brave and the home of the free."

INDICATIONS FOR SYMPHYSIOTOMY

1. Make sure that the child is alive and that its heart beats are strong, so that you can reasonably expect it to live after it is born. If you are in doubt as to whether it is alive or not, or if the heart beats are rapid and feeble and intermittent, do not operate. If the child is dead make craneotomy. The sacro-iliac joints must not be ankylosed. Soft parts must be dilated or dilatable—if the os is rigid it must be relaxed, there must be no obstruction at the pelvic outlet—for when once the joint is divided delivery must not meet with delay. The foregoing conditions must be present. The following conditions may call for the operation. Impaction of occipital posterior, impacted brow, persistent mento-posterior, where the chin of the child is in the hollow of the sacrum and the brow against or under the pubic bone—this position can not terminate spontaneously. Small, bony tumors at pelvic inlet. Pelvic contraction between the limits of $2\frac{3}{4}$ inches and $3\frac{1}{2}$ inches in the obstetric conjugate. It is below this limit of $2\frac{3}{4}$ inches, Caesarean section is the only operation, if above $3\frac{1}{2}$ inches, forceps and version should be resorted to. It is true that these are somewhat arbitrary limits and that the exact pelvic narrowing calling for symphysiotomy has not yet been determined.

Technique of the operation includes thorough emptying of bladder and bowels. The parts must be shaven and then scrubbed over the whole field of operation, and the vagina douched and scrubbed. There are two methods of operating—the subcutaneous or station method, the other is the open or German method. Either method has its advantages and disadvantages when measured one by the other; and, in fact, you are not always free to choose. Either method comprises five stages: First. The incision of the soft parts. Second. The incision of the joint and its ligaments. Third. The separation of the pubic rami. Fourth. Ex-

traction of child and placenta. Fifth. Suturing of the wound and immobilization of the joint.

First, then, the incision of the soft structures—you have decided to operate subcutaneously—the knife enters the integument about $\frac{3}{4}$ of an inch above the joint, it is extended upwards sufficiently to give you room to work back of the joint about two inches perhaps. You sever the structures downward through the skin, subcutaneous adipose tissues, to the fascia of the rectus muscle. You make a small cut through the fascia and muscle, either transversely or longitudinally, sufficient to admit the index finger of your left hand. Now the finger forces its way through and between the tissues, keeping close to the pubic bone. When the finger has made its way along the bone until it is hooked under the bone, then an assistant passes a sound into the bladder and draws the urethra to the right side—when this is done the second stage begins—with the index finger held under the arch, the symphysiotomy knife is passed alongside of the finger, close to the bone, until it is made to hook under the pubic bone, then, with a rocking motion of the knife, the pubic bone is cut from below upward and from within outward. This done, the third stage begins. During the section of the bone two assistants, one on either side, firmly grasp the limbs of the patient so that when the rami separate there may be no injury done to the sacro-iliac joints. Hemorrhage is checked by packing the wound with iodoform gauze. The bones may now be allowed to separate to the extent of $2\frac{1}{2}$ inches, when this limit is reached the assistants maintain the position of the spreading while the third stage of the operation is gone through with, namely, the extraction of child and placenta. As a rule, it will be necessary to apply forceps and assist delivery—while delivery is being effected the assistants hold the limbs firmly—when the child is born and the placenta has come away, the fifth stage in the operation begins, namely, the suturing of the wound and immobilizing of the joint—the first packing is removed and the wound cleaned if it has been exposed, then the sound is reintroduced before the ends of the rami are approximated and the urethra drawn down so as not to be pinched between the bones, when this occurs we have a vesico-vaginal fistula to contend with. The bones are not sutured, but the soft structures are, and dressed as usual. Then a broad piece of adhesive plaster is slipped under the hip of the patient, stretched smoothly by the assistants, then brought up over the pubic joint, covering the tracaners and crests. A muslin binder is also pinned firmly. The urine is to be drawn when necessary. She should lie on her back for two weeks, and on the third may be assisted to lie on her side, and at the end of the third week be allowed to sit up.

The open method is as follows: The parts are prepared as in the

subcutaneous method, the incision is begun about an inch above the pubic joint and it is carried over the anterior surface of the pubis until it has extended a little below the clitoris to the left. You do not stop to clamp bleeding vessels until you have reached the bone beneath the subcutaneous tissues, then, before severing the joint, you stop all bleeding points either with forceps or ligatures. Your left index finger is made to hook under the public arch as before, but you sever the joint with an ordinary bistoury from without inward, and from above downward. Just the reverse from the subcutaneous method. As great a light in obstetrics as Pinard of Paris always operates by this open method. When the joint proper has been divided you will find that it does not spread. What is the trouble?—the deep fascia and subpubic ligament have not been divided. Just at this point is where profuse and almost fatal hemorrhage has occurred. Dr. Harris, of Chicago, has contributed a valuable step to this open method, and when he has reached the point where these structures are stretched, he takes a blunt pointed bistoury, introduces it between the ends of the rami and cuts loose the fascia close to the rami of the pubis, until this fascia no longer prevents spreading. Now what has he accomplished? This deep fascia supports very important vascular structures. It is perforated by the vagina, the urethra, part of the corpora cavernosa of the clitoris, dorsal vein of the clitoris, the cavernous bodies about the vagina and urethra and the plexus of veins surrounding the vesical neck. These are all very important and vascular structures, and when the rami are made to separate this fascia must either stretch, tear or be cut. Now, as a matter of fact, it cannot stretch sufficiently and, accordingly, it must tear, and when it tears, it tears in the direction of least resistance, of course, and that is where the vessels perforate the fascia, and consequently the vessels are torn and an alarming hemorrhage is the result. But if this fascia is peeled off close to the bone on either side, very little bleeding from that source will take place.

This open method has the advantage that you can see every step of the operation and again you may be forced to adopt this method, for, supposing you have a persistent mento posterior position, with the chin wedged in the hollow of the sacrum and the brow crowded against the pubic arch, you may possibly be able to barely get your index finger under the pubic bone, but no room for the knife to work, then you must choose the open operation. The question naturally suggests itself after all this work, what have we gained? Well, we have gained only half an inch, practically. This does not seem much, but it is a good deal, under the circumstances. The diameters of the pelvic inlet are increased as follows: Conjugate, $\frac{1}{2}$ inch; transverse, $\frac{3}{4}$ inch; oblique, 1 inch.

The conjugate is the diameter of importance, and when the bone is separated to the distance of $2\frac{1}{2}$ inches it receives an increase of $\frac{1}{2}$ inch. Now let us take a case where the obstetric conjugate is at its lowest limit, $2\frac{3}{4}$ inches. Accordingly, we gain $\frac{1}{2}$ inch, which gives us a conjugate of $3\frac{1}{4}$ inches—the head is allowed to bulge between the ends of the rami to the extent of $\frac{1}{4}$ inch, that increases our diameter to $3\frac{1}{2}$ inches, and the average biparietal diameter of child is $3\frac{3}{4}$ inches, and moulding will reduce it $\frac{1}{4}$ inch, so you have things fitting pretty closely. A ball $3\frac{1}{2}$ inches in diameter passing through a hole of $3\frac{1}{2}$ inches, with no room to spare.

Finally, let us enumerate some of the dangers attending symphysiotomy: First. There is hemorrhage, it may be uncontrollable. The woman may be a bleeder, a condition of hemophilia. Second. Danger in sepsis. The wound is so near the excretory orifices of the body, where ptomaines are found and generated in abundance. Third. You may have necrosis of some of the soft structures, caused by prolonged pressure. Vesico-vaginal fistula results from pressure. Fourth. Imperfect union of pubic joint, causing the patient to wobble when she walks.

Clinical Experience.

RAYMOND DEL MAS, SC., PH. D., M. D.,
CENTERVILLE, MINN.

"If it be true that "epidemic waves" affect mankind at irregular intervals, we will find in our *Materia Medica* "remedial waves" more or less irregular, to cope with epidemic cases in general. While half of our town was affected with smallpox last winter, and the other half left intact, this year the latter has suffered from smallpox and the former with diphtheria. The remedies smallpox called for this year were Ant. Tart., Rhus Tox. and Sulph.—Ant. Tart. was the "general" remedy. It seemed to cover all of the cases we had there. Rhus Tox was used but once, and Bell. preceded it. Sulph. closed the scene for some that were slow to react. I must say that Ant. Tart. given early and not below 1 m checked all cases that called for it in a magic way, so that the constitutional symptoms would be ameliorated at once and the eruption limited to a few pimples that hardly ever suppurated. I have not seen a case of smallpox die this year. I was not here last year, but am told that all the patients that got allopathic dosing did so bad, that some died, and the others were forced to give up the treatment: "It did not agree with them." (?)

As to diphtheria, the remedies called for were: Lyc. Lach., and Merc. cy. Lost two cases, but the reader will excuse me for trying to exonerate both homeopathy and the writer. These two cases were seen on

the fifth day of the trouble and they died. Lyc. and Lach. were the chief remedies, Lach. being the leader. They both were used not lower than 1 m, not higher than 50 m. The latter potency did a better work than the former whenever it was used. It "pulled the child through" very much quicker.

One post-diphtheria trouble was cured with Bry. 1 m., 3 p. given one every half hour. The little patient, a pretty girl of five, was complaining of "pains in her hands and feet worse from motion and touch." Bry. put her up in three days. I must say that she was seen on her seventh day of laryngeal diphtheria and that Lach. 20 m cleared her throat in 24 hours—no membranes being left—and gave her a desire for food and amusement.

Mr. I. L., age 30. Married. Sept. 12, 1901. Pain (aching) in left lumbar region, due to overstraining. Worse on damp, rainy days; rest; morning on rising; better from motion, heat, while working. Rhus. Tox, 50 m, 2 powders. Within 5 days patient said he was "all right."

Mr. K., age 39. Married. Nov. 27, 1901. Palpitation for last few months. Worse after supper, driving, smoking, and going to sleep. Better from motion. Diarrhoea from change or warm to cold weather and from "sweets." Arg. Nit., 1 m, 2 p. Patient cured in one week. He is still well.

Mrs. S. D., age 39. Mother of 11 children. Dec. 5, 1901. Lancinating, intermittent pains in both "hypochondria," extend along ureters to bladder. Has been troubled with that for about five or six years. It is getting worse now. She can't do her housework any more. Had to hire a servant lately. Pains worse before and after urinating, better during urination and lying down. Dragging pains before and after urinating; says she feels as though her bladder would come out—tenesmus—lancinating, cutting pains with the tenesmus. Frequent urination; urging to urinate or else urine will escape. Urinates once or twice nights. Patient is "chilly," has an "aversion to milk," is thirsty for "cold water" which is worse in evening, and is generally worse from exertion and better from rest. Canth. c m, 2 p.

Dec. 16, 1902.—Patient has an aggravation half an hour after first powder. Felt so sick for two to three days that she could not sweep the floor. But the pains left her suddenly in both "hypochondria," then the ureters followed suit, but the bladder is still paining her; and today she reports that, although her frequent and urging urination is much better, tenesmus still exists "after urinating." Canth. c m, 1 p.

Dec. 29, 1901.—Patient enters the office smiling. She feels no more pains since the 20th. She had no "aggravation" this time. She wants some more of that "medicine" that she may be made "well for ever."

As the patient was "cured" and complained of an intermittent, burning pain over sacrum since she fell on the ice three years ago, while pregnant, she did not receive Canth., but arnica instead, the 1 m potency, 3 p.

The patient is still well, and her sacrum also.

Up to a year ago I practised allopathy and thought I could do well at it, but I fail to see yet how I would have managed the last case reported above. I am still astonished at the rapidity of the cure, and should any of my old comrades read this report, he undoubtedly would recommend me to the care of my old professor of mental diseases. But I am satisfied the light has fallen upon my path. Homeopathy is grand but hard to deal with. It is harder to find the similitum than to couch a string of crude drugs on an allopathic prescription blank, and it is also difficult at times to select the potency that will work on a plan similar to the derangement present in the vital economy.

Should We Attempt to Check Night Sweats in our Tubercular Patients?

J. T. LELAND, M. D.,
TINTAH, MINNESOTA.

Assuming that the minute histology of the tubercle is fully conceived and its associated pathology recognized, also that our general knowledge of physiology holds us to the hub of this disease instead of permitting us to go whirling off on some centrifugally evolved cure or "specific" do we venture to ask the above question.

Pulmonary tuberculosis, acute or chronic, means that that organ the lung from which the blood derives its life-giving burden—oxygen—is diseased, does not perform its normal function—due to the presence and growth of the bacilli of tubercle, which entertains itself according to the predisposition of the unfortunate host, in virulent and galloping destruction or with slow and insidious demeanor, increased but expectant, ever watchful for the opportunity of escape. It is to maintain this restriction and prevent escape, to even theorize on its entire eradication that I ask you to recall the physiology of the involved organ and its dependents that we may appreciate and thereby assist nature's attempt to be rid of this seed of the Great White Plague.

That vast area which through nature's wise provision is confined to millions of vesicles clustered into lobes two of which form the left and three the right lung, that scene of vital interchange of which the receiving of oxygen and discharge of carbonic acid gas form the principals, is invaded by a germ which we are to all intents overly enthusiastic about compared with the consideration we give the delicate vesicle it invades. We plan for the destruction and extermination of the

bacilli rather than for relief and life of the vesicle. In other words we overlook nature's mode of eliminating disease in our anxiety to strike down the invader.

"An abscess is a circumscribed cavity of new formation containing pus." While we may not agree that the tubercular invasion is the same histologically its physical expressions are abscess of the viscera is here considered. Whether caseating or what not, broken down tissue is present and metabolism is increased, producing the same resulting symptoms. Emaciation from lack of oxygen carried to muscular tissue, or retained waste products—in either case the result of crippled "internal respiration," loss of appetite, fever and sweat.

That these symptoms are the direct results of infection, are but the expression of nature's conflict, produced that we may assist if we will, is evident as we will see by a review of their individual physiology. If we would remember that pathology is but the physiology of a sick cell or organ we would be less apt to wander from an intelligent assistance, a. e. in intestinal infection we purge as nature and our law of similia suggests we should. In bronchitis we promote secretion as desired by cough. In inflammatory infection we drain as would nature eventually. Why should we therefore make an exception of sweating in the disease? Sweating the result of increased or obstructed metabolism is not weakening, it's the onesided interchange, the lack of building up material and collection of waste products producing the perspiration that is exhausting.

Any hint which an organ so vital to our well being gives, should be recognized and encouraged to the utmost. It would be well to remember also in this connection that while our patients may have had a predisposition it by no means concludes they are without personal idiosyncrasy. The predisposition idea has tended to "class" patients and we are apt to take them for granted. Remember that Jones has phthisis in spite of the fact that circumstances may make it look decidedly the reverse.

Assuming that our patient is fully in the grasp of this dreaded disease what must we do while Ponce de Leons seek the specific?

Beginning most frequently in the apex of the right lung we naturally conclude it is a point of feeble resistance why? Knowing that bacilli encapsuled or retained in lymphatic glands are less virulent, as demonstrated by experiment, and that the organs tributary to lymph drainage in the right side—in the region of right apex—are hampered by a less generous outlet, as compared with that of the left, we are, I think, encouraged to believe that upon a healthy and unoppressed lymphatic flow depends our greatest hopes of assisting the vesicle in its never ceasing conflict.

Admitting the probability of the foregoing supposition we can hardly assert that in checking night sweats we are in any way assisting nature in her efforts to throw off waste matter.

The influence which the lymphatic system exerts is also supported by the fact that numerous "stroma" are distributed throughout the pleura indicating that the lymphatic circulation in the lungs is extensive, and again remembering that moisture exhaled is derived principally from the intestinal tract and that intestinal infection has a baneful influence on the bronchial tubes, as seen in typhoid fever where the lesion permits infection to enter through the lacteals and invade the general lymphatic system. We will see that a direct communication exists between the intestinal canal and skin and that the lungs are intermediate in a sense—knowing also that more oxygen is inhaled at night—the time of sweating—we must conclude that nature takes advantage of the increased supply to be rid of accumulating refuse matter.

Why we should attempt to suppress the result of this effort by picrotoxin or agaricine seems illogical to our understanding of medical science.

With the lymphatic system exerting its best influence we have the blood carrying its food with a minimum amount of opposition and as oxygen is appreciated according to the vitality—you might say—of the haemoglobin carried by the red corpuscle we can understand not only the value of preventing lymphatic engorgement but endeavoring to place the red corpuscle in such a position as will best serve the oxygen carrier—haemoglobin.

Instead therefore of checking the result of this vast filtering let us attempt to encourage it.

- 1st. By clearing and keeping clean the intestinal tract.
- 2nd. By sustaining the loss involved and introducing a neutral fluid to encourage further elimination.
- 3rd. By supplying easily assimilated food with special reference to the red corpuscle.

With sanitary surroundings and the imperative outdoor life in a climate suited to the individual we would expect to accomplish these three cardinal principles with success and I know of no way in which the first may be accomplished better than by giving magnesium sulphate in doses to suit the individual, largely diluted, so that final measures in this line will simply consist in large draughts of water which is absolutely essential to the accompanying treatment.

The second object and the most important deals with the introduction of a neutral fluid which will with the aid of proper bowel attention supplant and become a new vehicle to carry the tired and baffled corpuscle.

Normal salt solution per rectum and by subcutaneous injection throwing the solution between the superficial and deep cervical fascia immediately to the lung involved. The early morning hours are best suited for this treatment and should be preceded by alcohol or salt rubs to increase cutaneous circulation and support the patient after the drenching sweats he has experienced. It is here small amounts of brandy may be allowed and strychnine hypodermatically if necessary.

This brings us to the third step—feeding—and we can congratulate ourselves if we meet and overcome individual idiosyncrasies with a minimum amount of real or imaginary disturbance. It is here that it would be better to forget the patient rather than to be indifferent to the object desired—speedy and permanent nutrition of the red blood cell—you may almost say blood stuffing.

The beneficial influence of fats and oils in this disease should not be restricted to their ready oxidization more than to the stimulating influence they exert through intestinal digestion exciting the pancreas and liver which assists lymphatic circulation. Fresh beef juice is the ideal food in this connection and should be given in large quantities from one pint to two or three—well salted—the latter is emphasized because the general condition demands it and water is more apt to be appreciated. Ferrum phos., ferrum picricum together with arsenicum ido., stannum iodide and silicea may be thought of in this connection also. If fats are well borne they may be encouraged by small doses of merc. sol. or oxgall.

This cleaning process followed by flushing—if you please, stimulates the entire vascular system giving a “tone” throughout the “right of way” of each and every radical of the same that the subsequent nutrition may be appreciated thus sustaining the struggling vesicle to the utmost.

With this crude attempt to grasp and follow that which nature in her various expressions signifies we should, I ask you to pause with thumb on the evasive bacilli if you will and look around. Upon the one hand a suppressed and wrongly judged excretion, upon the other a neglected yet ever welcoming source for the introduction of material best suited to supplant the loss and give new life to future elimination, while behind and threateningly overhanging is the debris from the numerous ruts we have burrowed in our impatient plunges to reach and check that which our mode of attack makes only the more evasive—the tubercle bacilli.

The mad cry of “death to the germ of consumption” has led us stumbling and blinded over the very paths which would lead us to a point where a more effective resistance could be made—not so brilliant as the dream of overwhelming the germ itself by some serum it is true—but none the less appreciated by the hampered vesicle which is compelled to suffer while we cavort at therapeutic grab bagging.

We can call it by no other name when we in our anxiety to check the germ unmindful of the importance of perfecting assimilation and elimination, introduce a drug in appreciable quantities expecting it to be joyfully received and carried to the scene of action on the shoulders of the enthusiastic leukocyte—a triumphant march indeed, theoretically,—but in fact a sad and unthinking procedure.

Because leukocytosis is an accompaniment of infection is no reason why we should take occasion to unload our “cure alls” upon it, thereby creating not only a new burden but interfering with its natural action.

As neurasthenia was formally the signal for a “broadside” of tonics and fats which the patient in no manner could appreciate as we at length learned, so is phthisis today the target for cresote and guaiacol because of our endeavors to introduce them in appreciable amounts hoping that they may exert a mechanical influence instead of introducing them in such a form that they will become accessory instead of detrimental to the leukocyte.

If we admit that the unaided leukocyte has a restraining influence and our laboratory upholds the antagonism of these two medicaments to the tubercle bacilli, truly the two congenially introduced would constitute a combatant worthy the effort. If, however, we cannot restrain the desire to medicate “test-tubeacally” our efforts had best be omitted permitting nature’s own guard—the white blood corpuscle—to do its work unhampered.

Realizing this we must not depreciate the importance of a suitable climate, neither need we reluctantly concede that upon its influence alone depends the relief obtained as our present mode of medication compels us to admit.

Patients should have an occupation no matter at what stage they have arrived and because they are on their back in no way need exclude them. Let them be wheeled to certain points there to receive the attention of physician in charge. Upon their own efforts in a sense depends their careful attention.

Nothing is so discouraging to the physician—and consequently to patient and attendants—a most deplorable evil in any disease—as that utter helplessness which disdaining all attempts at arousal festers in its own mental and physical lethergy. They should seek the doctor therefore, whether upon a cot or walking, the monotony is relieved and they have a mission instead of a monotonous expectancy.

The government should set aside a tract of land including the eastern and western slope of the southern Rockies with its intervening peaks, which should be well stocked with cattle. Having stations at 10 and 20 mile intervals communicating by stage. Let each station have a dormi-

tory in every room of which is a fire place, and a large bay window where patients may take sun baths and sleep, all windows being open. During the day he is locked out of his room and if able takes the saddle for the next station and so on, depending on his condition as to whether he will ascend or remain on the slope. Those who are further advanced of course are compelled to adopt a milder but none the less imperative mode of "moving on" and the Chinese mode of transportation is adopted permitting of fresh air and at the same time reducing to a minimum the dust evil—narrow paths of which there may be many leading to and from each station—not only afford a change, but no dusty thoroughfare is established. He may pass back and forth between only two stations, but that he must do. If necessary their mail may be carried by compelling them to take a journey to hear from home, thereby doing away with the visiting in each other's rooms and the "brooding" which follows the discussion of "letters from home."

The cattle are attended by those who are able, having of course experienced "cow punchers" for rainy days and for general directions. The cattle being prairie fed and roaming are of course best suited for the preparation of beef juice—of which all patients receive a liberal supply. "I'm going for beef juice, sir, she said," would be the statement apropos to that of the dairy maid of yore, with emphasis on the going.

Filling each hour without making the days too machine like will divert the mind leaving an unopposed field for our physically directed efforts.

With this chain of stations one can feel he is not isolated nor yet in a crowded sanitarium and withall he has the feeling that there is an individual duty to be performed. As it will be the medical director's first duty to assign some responsibility, either the carrying of mail, special messages or simply placing them on the ascending and descending scale of stations which means variation.

Each station has a corps of physicians and nurses who are under the supervision of a chief physician who has charge of ten or more stations. The physicians are chosen from the ranks of the American Institute of Homeopathy, the American Medical Association and the National Eclectic Medical Association by their respective fellow members thus doing away with politics and favoritism. The business, or commissary department is conducted by a non-medical man appointed by the President. All questions pertaining to management are decided by a board of medical directors which is made up of chief physicians.

Expenses are paid by the taxation of patent medicine and the issuing of a special postage stamp by the government called the "Humanity Stamp" which would sell for three cents the extra cent being for the maintenance of this institution.

Each station would have its garden and herd of Jerseys. No patient would be allowed "wagon loads" of trunks, and while no uniform would be adopted there must needs be a uniformity as to simpleness of dress.

Statistics could be gathered without stretch of imagination. Altitude could be studied with reference to individuals.

Massage and sun baths in which every inch of the skin's surface is exposed to the direct rays of the sun are made imperative, and the accumulating therapeutical knowledge of men irrespective of school would be brought face to face with boasted(?) results. The good alone would stand and humanity, through the wise provision of an enlightened nation, would reap the reward.

SELECTIONS.

The Protozoon of Cancer.

Harvey R. Gaylord publishes in the American Journal of the Medical Sciences, May, 1901, a report of his cancer study during the past three years in New York State Pathological Laboratory. He describes some incubation inoculation experiments previously referred to in a communication made in the Medical Society of the State of New York in 1899. In a case of adenocarcinoma of the peritoneum the greater portion of the tumor had undergone mucoid degeneration and the peritoneal cavity was filled with a clear, straw-colored fluid. This fluid, removed with every aseptic precaution, was found to contain a large number of small hyaline bodies, which were observed under the microscope to increase in size and change their form and pass through a cycle of development to what appeared to be a spore-forming stage. This fluid was injected into three animals—two, a dog and a guinea-pig, into the peritoneal cavity; one, a guinea-pig, into the jugular vein. The guinea-pig and dog, which were inoculated in the peritoneal cavity, developed no tumor, but a marked peritonitis and enlargement of the regional lymph nodes. The abdominal cavity of each animal contained a small amount of fluid; and in this fluid could be detected the characteristic spherical bodies, nucleated bodies, and sacs filled with granules present in the primary case. In slides taken from this fluid and incubated for a period of three or four days in the thermostat it was possible to trace the development of larger structures from the small hyaline forms. Of particular interest was a portion of a slide so treated in which were found numbers of the organisms which had sent out pseudopodia toward a neighboring air-bell. In the animal injected in the jugular vein, killed after 50 days, the lungs were found

to contain minute white nodules, which were beginning foci of adenocarcinoma. The pulmonary blood vessels showed marked proliferation of the epithelial and adventitial cells. The spleen of the animal contained a large amount of blood-pigment, and the Malpighian corpuscles were enlarged. The cells of the tumor and those of the enlarged follicles in the spleen were each found to contain within the nucleus irregularly shaped, deeply stained bodies of unusual appearance. About the periphery of the follicles and scattered through the splenic pulp were a number of round oval bodies, which corresponded morphologically to what are known as Russell's fuchsin bodies. In the perivascular lymph spaces of the lung there has since been detected, by means of Plimmer's staining-method, the presence of the half grown organisms in large numbers, which correspond to those described by him as of constant occurrence in carcinoma in man.

Early attempts to cultivate these organisms were negative in their results, but in later experiments Gaylord has succeeded in cultivating the organisms, directly from cancer, and from experimental animals. The culture medium which he has found to be most satisfactory is fucus crispus bouillon, recommended by Celli for the cultivation of amebae. The micro-organisms found in the peritoneal fluid were pale, spherical bodies from 2 to 10 microns in size. They were homogeneous, of pale, yellowish-green color, and at first were mistaken for fat droplets, although on close examination their refractive index was seen to be too low. They were likewise resistant to ether, and when treated with osmic acid they failed to give the black reaction which characterizes fat. Attempts to stain them were partly successful. A few of the bodies contained granular material, which showed marked Brownian movement. The tubes were examined from day to day, and it was seen that the bodies slowly increased in size, became more indefinite, and gradually lost their yellowish-green color. As they increased in size they apparently became more fluid and commonly sent out pseudopods and long projections. Fine colorless granules appeared in the protoplasm, and in some a delicate nucleus could be made out. Ultimately, the larger forms of the organism became transformed into what appeared to be large sacs containing highly refractive granules and small spherical bodies above described. The membrane of the sac was demonstrable as a pale, colorless structure. The diameter of these sacs was on the average about 20 to 25 microns, or that of a good-sized epithelial cell. The author determined to his satisfaction that the yeast organism was not the essential cause of carcinoma and sarcoma and could not be confused with the organism already observed by him in fresh scrapings of carcinoma and in his experimental animals, and convinced himself of

the identity of the organisms found in the fresh state and the forms known as Russell's bodies, Plimmer's bodies, and protozoon forms in the tissues. The organism is a protozoon belonging in the same group with the vaccine organism described by Funk in the *British Medical Journal* for February 23, 1901. It was found abundantly in all the organs, including the blood, in all cases of cancer examined, and in all cases in which cachexia was well marked the organism, especially in its younger forms, could be found in the peripheral blood.—*Medical Record*.

The Doctor's Office Literature.

Have you seen that quaint collection of the things of other days,
Which in any doctor's office meets the weary patient's gaze;
Which consists of battered numbers of three-year-old magazines,
And some illustrated papers full of long-past battle scenes?
Have you seen those hoary relics of the antiquated past,
Which with "trophies" and "mementos" could be very fitly classed?
If you haven't, make a journey up to that abode of gloom
Which is known to fame and patients as the doctor's waiting-room.

There they lie, upon the table, and you look them o'er and o'er,
Searching vainly for some story that you haven't read before.
For the chairs are full of people, and you've simply time to burn,
Ere a welcome voice announces that at last has come your turn.
There's a Puck of last year's vintage and a Life of '98,
And a Munsey and a Scribner's of a yet more antique date,
And a Harper illustrating Admiral Montejo's doom.
All are in that weird collection in the doctor's waiting-room.

Through the pile you run your fingers, for you've nothing else to do,
Eagerly you pounce upon it, till, disgustedly, you see
That it's some prosaic treatise on applied pathology;
And if chance some other new one shall reward your wild pursuit,
You'll discover it's a record of the "Bilious Institute."
You can dig there for an hour, but whatever you exhume
Will be just the same old rubbish, in the doctor's waiting-room.

J. J. Montague in Portland Oregonian.

Therapeutics of Small Doses.

In the former times the tendency was to give large doses of medicine. A pint bottle was frequently filled, and a tablespoonful, and sometimes two, were given at a dose. Some of the older books recommend forty, and even sixty grains of quinin at a dose; and twenty grains of calomel were given at a time, and even more. The tendency is now

towards elegance and small doses. Since the discovery of the various alkaloids, it is more common to prescribe small and frequently-repeated doses, and many authorities claim that they are equally effectual as larger doses. I do not advocate small doses in all cases, for there are diseases which can be treated with heroic doses. In follicular tonsilitis and scarlet fever, one-grain doses of potassium chlorate every hour will afford much relief, and is likewise beneficial in diphtheria. One-grain doses of croton-chloral every half hour is beneficial in facial neuralgia. In obstinate cases of urticaria, sodium salicylate in two-grain doses every half hour acts well; also does drop doses of balsam copaiba every half hour.

Sidney Ringer says: "In the so-called irritative dyspepsia, where the tongue is furred, and the papillae red and prominent, a drop dose of Fowler's solution taken shortly before eating, will be found of great benefit. Administered in the same way, it will arrest the distressing vomiting of drunkards, and simultaneously improve the state of the stomach." Given in the same dose it is often beneficial in vomiting in pregnancy.

One-tenth grain pilocarpin hydrochlorate hypodermically is useful in erysipelas, and Waugh claims it a specific in sthenic cases. Drop doses of wine of ipecac is useful in vomiting of cancer, given every fifteen minutes; also in vomiting of children. For vomiting of infants, A. A. Smith, of New York, has used one grain of calomel to one ounce of lime water; to this add one pint of pure water, and give a teaspoonful of this mixture every ten minutes. In the wheezing and cough of children with bronchitis, good results may be obtained with tartar emetic, one-half grain to one pint of water, a teaspoonful every half hour. Sick headache is sometimes relieved by drop doses of tincture of nux vomica every five minutes.

One of the best remedies for inflammation of the bladder is one drop of tincture of cantharides every hour. A drop of the tincture given three or four times a day is particularly useful where there is a desire to make water accompanied by great pain in the region of prostate gland, and along the urethra, while at other times severe twinges of pain are felt in the same part; the urine being healthy, or otherwise containing an excess of mucus, or even a small amount of pus. Women, especially of middle age, often suffer from a desire to pass water and inability to hold it for a long time, others cannot help passing urine on standing or sneezing or coughing; one drop three times a day gives great relief, and sometimes cures with astonishing rapidity, even where symptoms have lasted for a long time.

In excessive menstruation fluid extract of ergot has been successfully used in minim doses every half hour for six or eight hours before

expected flow. A simple febrile condition with hot, dry skin, full bounding pulse, may be relieved by half minim doses of tincture of aconite repeated every half hour; also useful in nasal catarrh, and the commencement of tonsilitis. Subacute nasal catarrh, with abundant secretion, is of tenallayed by minim doses of tincture of belladonna every half hour until eight or ten minims are given. Apomorphin in doses of 1-200 grain four times a day often produces brilliant results in spasmodic cough. *Cannabis indica* 1-3 to 1-2 grain given for weeks three times a day is useful in the treatment of migraine.

Atropin in doses of 1-200 grain usually controls night sweats. Digitalis in small doses frequently repeated exerts a beneficial influence over various kinds of hemorrhages.

In cases of tonsilitis, when the tonsils are enlarged and almost touching, and danger of patient suffocating, one-third of a grain of mercury-with-chalk every hour will relieve the trouble. The same powder in same doses four times a day is beneficial in mumps. Small and frequently repeated doses of calomel, 1-26 to 1-10 of a grain every hour, are useful in diarrhea of children. Likewise, in so-called bilious vomiting of adults.

Many more examples might be referred to, but I feel this is sufficient to prove much smaller doses might be used than usually are. I claim no originality, but have collected these facts from various sources, and have demonstrated the most of them by actual practice.—Read before the St. John Medical Society by J. H. Gray, M. D.

(And still the old school say there is nothing of value in homoeopathy.—Ed.)

The Unrecognized Chancre.

The Unrecognized Chancre.—In the International Medical Magazine for October, William S. Gottheil calls attention to the frequent insignificance and fugacity of the syphilitic initial lesion, which leads to its non-recognition in quite a large proportion of cases. Ignorance of its occurrence, and not voluntary falsification, is the cause of the frequent absence of a syphilitic history in undoubtedly specific cases. The author calls attention to the following points of diagnosis:

1. The presence of a tumor as the original lesion. In its essence, and invariably at the beginning, the chancre is a small, round cell accumulation in the skin or subcutaneous tissue. Ulceration may occur, and usually does, or even phagadaenism; but these are accidental, and epiphenomena, and almost invariably the specific induration is appreciable at the base of the lesion.
2. The tumor is indolent, painful, and recalcitrant to treatment.
3. A peculiar and characteristic "stony" induration of the nearest

lymphatic glands accompanies it, different from the general adenopathy that occurs later as a consequence of the systematic infection. Other lesions, as gummata, do not show it.

4. Chancre runs its full course in a few weeks, whilst tuberculosis takes months, and carcinoma even years, for its development.

5. The well known signs of general luetic infection, osteocopic pain, cephalalgia, synovitis, general lymphadenitis, exanthem, etc., must be carefully and persistently searched for in every suspicious case. They may be so slight as to entirely escape careless examination.

Actino-Therapy.

In a preliminary communication upon the use of concentrated light in the treatment of dermal affections, W. S. Gottheil briefly reviews the work done by Finsen, Kime and others in this field, and describes the arc light that he employs for the purpose. This is at present the only available source for the actinic rays of sufficient volume and intensity for therapeutic employment. Sunlight is of course the best, and is costless; but it is too uncertain for satisfactory use. No combination of incandescent bulbs, run on the ordinary continuous or alternating commercial current, is sufficiently actinic, and the apparatuses arranged with them practically give us heat and no light baths.

The author employs an apparatus called the Actinolyte, made by Kliegel Bros., of New York, which can be adopted to either the continuous or the alternating current, uses from 25 to 55 amperes and gives a concentrated circle of light of from 20,000 to 30,000 candle power. He is not prepared as yet to publish his results, but the progress of cases of lupoid and syphilitic ulceration has been most encouraging. The cosmetic results of this non-operative and painless method of treatment are especially good; a point of the greatest importance, of course, when the face is involved.—*The Medical News.*

Dermatitis Herpetiformis.

Dermatitis herpetiformis, first described by Professor Duhring, of Philadelphia, is probably of commoner occurrence than is generally supposed, more especially in children; two cases are described by William S. Gottheil, of New York, in the June number of the Archives of Pediatrics. The resemblance at first sight to an ordinary eczema, dermatitis, or impetigo, is marked, and doubtless cases of the disease are not infrequently so classified. The points which distinguish the less common affection are:

1. The extreme obstinacy and chronicity of the malady; it being prolonged almost indefinitely by successive exacerbations or relapses.
2. Its original herpetic character and subsequent multiformity of lesion.
3. The intense pruritus.
4. Its recalcitrancy to treatment.

Any apparent eczema, dermatitis, or impetigo in children presenting these features should be carefully observed; a certain number of them will undoubtedly be found to be cases of Duhring's disease.

Curability of Syphilis.

Speaking of the curability of syphilis in the symposium upon that disease in the October number of the *International Medical Magazine*. William S. Gottheil, of New York, takes exception to the opinion of its practical incurability which is prevalent in certain quarters. Every day experience shows that the great majority of cases are cured in every practical sense, the occasional late relapses and accidents to the contrary notwithstanding. He concludes:

1. Syphilis is a curable disease, and may even, with restrictions, be called a self-limited one.
2. Whilst cure in a given case cannot be affirmed with scientific accuracy, the chances of its being the fact after a certain time under proper treatment are so great that it may be properly claimed to have been affected.
3. Practically, a patient who has been properly treated throughout the active stages of the disease, and who has no manifestations of its persistence for several years thereafter, may be regarded as cured, and may be told so.

Importance of Pure Water.

The January number of the *Sanitarian* has a timely and instructive articles by Dr. A. L. Wood, of Brooklyn, N. Y., on "The Influence of Water Upon Health and Longevity." Its exposition of the disease and mortality that can be traced to impure water is startling.

Nicola Tesla is quoted as saying that for every person who perishes from the effects of a stimulant at least a thousand die from the consequences of drinking impure water. "The precious fluid which daily infuses new life into us is likewise the chief vehicle through which disease and death enter our bodies." Of the 6,046 lives which the Spanish-American war cost the United States, 5,438 were lost through disease. Dr. Wood says that if the soldiers had been provided with pure water, nine-tenths of that number would have been saved. During the year ending May 31, 1900, there were 35,379 deaths from typhoid fever in the United States, nearly all of which were caused by disease germs in water. There are many other fatal diseases which are caused by the drinking of water holding disease germs. Diarrheal diseases belong to this category, and they caused the death of 46,907 persons during the period mentioned. The annual death loss from impure water is probably not less than 100,000, or 2,000 a week. Then there are the vast numbers of persons who recover from these diseases with their constitutions impaired. many to be invalids for the rest of their lives.

Dr. Wood dwells on the impurity of city water and holds that at the best it must be more or less impure. But even if it be impossible to secure absolutely pure water for general distribution through a system of pipes, it is certain that the more it approximates purity the fewer deaths it will cause. Here in Minneapolis we have had appalling demonstrations of the varying degrees of disease caused by varying conditions of the water supply. At the best Mississippi river water is not harmless, but it has been demonstrated that water distributed from the lower pumping stations in the heart of the city, is much more dangerous than that from the Camden Place pumping station, which escapes the pollution of the surface drainage of the city. It has been shown that whenever water from the lower station is turned into the mains, there follows, as soon as the germs have an opportunity to assert themselves, a pronounced increase in the number of typhoid fever cases in the city. There is no doubt whatever about the connection.

In view of such facts, ought not the creation of a pure water supply to be the first thought of the people and the municipal authorities? It is truly a matter of life and death. As such it really ought, in every community, to have precedence over all other ordinary municipal problems.

The Growth of Minnesota's University.

Registrar Johnson, of the University, has prepared a table of statistics covering the years from 1887 to 1901. During this period the growth of the University was sixteen times as rapid as the growth of the state. In 1887 the enrollment was 412 and in 1901 it was 3,413. The average attendance per 10,000 population has increased from 3.49 in 1887 to 18.48 in 1901. While the actual cost to each person in the state has increased since 1887 from 2.996 cents to 8.68 cents, the expense to each person in the state for each student in the University has decreased from .0072 to .0025, so that at present it is about one-third what it was fifteen years ago. If the cost per capita to each person to support each student in the University had remained stationary since 1887, the cost per capita to each person in the state at the present time would be 15.7 instead of 8.68, as it is. In 1887 the total expense of the institution was \$69,730.33 and in 1901 it was \$412,164.99. In the same years the cost per student has fallen from \$169.24 to \$120.75.

Minnesota has a smaller expenditure than other institutions. Minnesota's expenditures in 1901, which do not include buildings or extraordinary repairs, were \$412,162.99, while Yale and Michigan had \$776,760 and \$502,306.84, respectively.—*Mpls. Journal*.

ANNOUNCEMENTS.

A. I. H.

To the Members of the American Institute of Homoeopathy:

The president of the American Institute is able to announce that it is now possible to forecast, to a great extent, the conditions which will attend the holding of the fifty-eighth annual meeting of our great national association, to be held in Cleveland, Ohio, June 17th to 21st, 1902.

The local headquarters will be at the Hotel Hollenden, which is one of the finest hotels in the United States, and in its arrangement and appointments is peculiarly well adapted to the purposes of the meeting. The house and its furnishings may be termed elegant, and its cuisine is of the best. A new addition is being built, which will be ready for occupancy in June. The hotel will accommodate 700 guests. A special reduced rate for rooms will be made for Institute members. The Hollenden is on the European plan. The "Colonial," across the street, is another first-class hotel, and can accommodate a large number. It is on the American plan. Other smaller hotels are conveniently near.

The hall for the meetings, in the Chamber of Commerce building, not far from the Hollenden, is splendidly adapted to the Institute's purpose. The hall is large—seating one thousand—it has attached to it numerous committee rooms, and, what is of especial interest and importance, it is quiet, being entirely out of hearing of the noises incident to traffic in busy city streets.

At the present time there is favorable prospect that the several allied societies will combine with the corresponding sections of the Institute, by mutual agreement between the officers of the various bodies, so that this year their work will practically be a part of the work of the Institute. This is looked upon as being a fortunate arrangement, and one which will add greatly to the interest of the coming meeting.

It is hoped to have as a special feature of the meeting a "College Alumni Conclave." This, if arrangements are completed, will be held under the auspices of the Institute authorities, and, while affording every opportunity for the enjoyment of the occasion, it will differ in important respects from alumni reunions which have been held in the past. The alumni of the various colleges will, upon arrival in Cleveland, register at headquarters, which will be provided for them by the Committee of Arrangements, at the Hollenden. On Thursday evening the general conclave will be held at the Chamber of Commerce hall. It is especially desired that the women graduates of our co-educational institutes shall take part. The program for the evening's entertainment will be arranged

by the special committee, acting in conjunction with the Institute authorities. The entertainment will consist of appropriate music, orchestral and quartette, and the singing of college songs, together with brief speeches by representatives of the various colleges. In addition to this feature the local committee of Cleveland will, for the several days of the meeting, provide appropriate entertainments of various kinds, which, while not conflicting with the Institute sessions, will afford diversion suited to all.

The location of Cleveland is especially favorable. It is easily accessible from the east, from the south, from the west, and from Canada. It is a convenient common meeting-place for all. It is, as yet, too early to announce the arrangements that will be made with the various railroads in the matter of reduced rates of fare. These will be made known in due time.

Cleveland is a city which is more than usually adapted for convention purposes for a body the size of the American Institute of Homoeopathy. It is pleasantly located on the shore of Lake Erie. It has wide streets lined by many shade trees, beautiful drives and parks, fine hotels, golf links, club houses and every attraction possible to offer to any place aspiring to entertain such a body as our national organization. The local profession is united, harmonious, and enthusiastic in the work that is given them to do. They are making every preparation and looking forward with anticipations of the greatest pleasure to becoming the hosts of the Institute on this important occasion. There is not a cloud in the sky. All promises well, and there is every prospect that our meeting in Cleveland will be a large one in the matter of attendance, harmonious in its labors, enthusiastic in the spirit that will prevail, and in all respects one of the most successful ever recorded in the history of the Institute.

The Executive Committee is thoroughly convinced, and more than ever satisfied, that in the best interests of the Institute it has made absolutely the wisest choice in selecting Cleveland for the next place of meeting.

JAMES C. WOOD, M. D., President.

CH. GATCHELL, M. D., Secretary.

The Old Guard.

The next annual meeting will be held in Chicago in June.

"The membership shall include homoeopathic physicians who have been graduates in medicine for thirty years. The oldest member present shall preside."

The object of this organization is to guard homoeopathy and to advance the cause.

At the last meeting it was voted that each member should write out for publication: "How I Became a Homoeopath," and send it to the secretary. It was also decided that each member be requested to give his experience with our various remedies in the treatment of disease, according to Similia: taking Jhar's "Forty Years' Practice" and Bayes' "Applied Homoeopathy" as guides. These experiences are to be published for the benefit of their less informed brethren, in such medical journals as the members may elect.

In reply to inquiries, it may be said that any earnest, reputable, homoeopathic physician, anywhere above the age limit, may apply for membership.

T. C. DUNCAN, M. D. (66), Secretary,
100 State St., Chicago.

Minnesota State Society.

The Minnesota State Homœopathic Institute meets in Minneapolis, May 21, 22 and 23. The committee of local arrangements Drs. Richardson, Eaton, and Paul Higbee, intend to give visiting physicians the treat of their lives. President Lufkin and Secretary Aldrich are hard at work on the program of the meeting and announce a mental treat.

The Illinois Homœopathic Society meets in Chicago, May 13, 14 and 15, at Masonic Temple, address Dr. E. J. George the indefatigable secretary who has many cards up his sleeve.

The Missouri Homœopathic Society meets in St. Louis, April 28, 29 and 30, Dr. L. P. Crutcher is secretary.

Dr. Amanda C. Bray, Worcester, Mass., will take a party of ladies abroad in June. Address her as above.

Recently there came to my notice a statement recommending a solution of bicarbonate of soda for the removal of cerumen from the ear. The writer says: "Fill the ear with a solution of sodium bicarbonate and the cerumen can usually be easily removed the following day." Don't do it. You may rupture the drum. Fill a quart fountain syringe with a solution of carbonate of potash—say four drams to the quart—hang up the fountain about eighteen inches to two feet above the patient's head (sitting); instead if the usual syringe nozzle, straighten a metallic Eustachean catheter and use it instead. Now irrigate the ear; regulate the water pressure by compressing the rubber tube. If this is not an improvement over the hydrogen peroxide or sodium bicarbonate method, let me know. I have always, with but one exception, removed all the cerumen at the first sitting in this way. Try it.

MINNEAPOLIS HOMŒOPATHIC MAGAZINE.

EDITORS.

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The editors are responsible for the maintenance of the dignity and courtesy of the journal, but NOT for the opinions expressed by contributors. Requests for reprints should accompany manuscript. No discourteous or anonymous communications will be recognised.

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All subscriptions and communications in reference to advertising etc., should be addressed to MAGAZINE PUBLISHING CO., Medical Block, Minneapolis, Minn.

EDITORIAL.

Medical Board Reciprocity.

At last there seems some probability of the realization of our dreams of reciprocity between the various state medical boards. At a meeting held in Chicago January 17th, representatives of the Michigan, Indiana, Illinois and Wisconsin boards met and initiated proceedings looking towards an interchange of licenses. At that meeting it was decided to have all state boards represented draw up resolutions expressing their individual views regarding legislation necessary to effect the desired end and details of a reciprocal agreement, said resolutions and details to be presented and discussed at another meeting to be held in Chicago in May. Here is a chance for the Minnesota board to climb into the band wagon; reciprocity has long been one of the much-longed-for privileges of physicians, and as the Minnesota law allows of such action on the part of the Examining Board without the necessity of special legislation it behooves the powers that be to send a delegate to Chicago to see that Minnesota gets into the concert of powers. Reciprocity, if limited to those who have been licensed by examination or upon presentation of a creditable diploma, would be a benefit to the profession and the people, but it should not extend to "exemption certificates."—P.

Public Ambulance Service

Notwithstanding the fact that London is generally conceded to be the metropolis of the world there are some things in which Minneapolis equals it. One of these is its public ambulance service. In "dear old Lun'on" when a person is taken suddenly ill or suffers an accident on the street or in a public place his immediate wants and needs are attended to by the nearest policeman or any interested passer-by; then the sufferer is bundled into a cab and jolted to a hospital or home or else is carried about in a litter until some temporary shelter can be secured. In Minneapolis much the same process takes place, only the police patrol wagon is substituted for the cab, and there are no litters. To one who is familiar with ambulance service in other cities and who knows how much can be done at little expense in the way of providing suitable care of those injured or taken sick on the streets, such neglect as is seen in Minneapolis almost daily is jarring to the sensibilities. It is no uncommon thing to read of prominent and respectable citizens being hauled home in a patrol wagon just like a common drunk or a criminal.

Considering the wealth of Minneapolis, the position it endeavors to hold amongst the cities of civilized America and the growing frequency of street accidents and emergencies it would seem that it was nothing more than right that the city should make proper provision to meet these emergencies to the best interests of her citizens and visitors. The victims of these unexpected happenings are apt to suffer more harm than otherwise if left to the mercies of the policemen or passer-by, as such persons have usually very poor ideas of medical or surgical procedure and their well meant, but ignorant, efforts may as quickly result in a funeral as in benefiting the victim. It would do the city no harm to maintain an ambulance, properly equipped and attended by a surgeon, which could be at the call of persons needing such care, and whereby they could be conveyed to their homes. With numerous telephones scattered throughout the city there is hardly any point from which a call could not be sent to the central station, thus facilitating the efficacy of the service without putting the city to the expense of a special ambulance alarm system. True, there are ambulances at the various hospitals, but these are for the use of the hospitals and can not be called upon for other work than conveying patients to these hospitals.

Should the city powers fail to see the occasion and rise to it, there is an opportunity for some thrifty undertaker or liveryman to drum up a little business and get some advertising. The first ambulance I ever worked on was one owned and operated by an undertaker, and it was a good investment for all concerned, so much so that other undertakers

followed the example and there was soon a keen rivalry in the ambulance service.—P.

There are thousands of physicians who firmly believe the assertion of Prof. Koch that malarial fever is due to the administration of quinine, yet deny the assertion of Hahnemann that malarial fever is due to the administration of quinine. Queer, ain't it?—P.

Ever since the days of that tragedy participated in by alopeciac Elisha, some disrespectful children and the avenging bears, we have been told to respect our elders. This is especially so in medical circles where the young medico has it impressed upon him very early in his career that he should be seen and not heard, and that upon all occasions he should give way to his gray-haired or bald-headed "seniors." Many of these "seniors" seek to carry out the ancient and venerable delusion that a bald head is a sign of wisdom, and suppress the truth—that it is merely an evidence of a diseased scalp. Seniority in medicine should be based upon knowledge and experience. The man who takes up the study of medicine at fifty often expects to outrank the man who graduated at twenty-five and who has had a score of years of experience. Again the old graduate who has lagged by the way expects to rank with his fellow graduate who has kept pace with the progress of his profession. Such things should not and cannot be; the gray-haired or bald-headed novitiate has no right to expect or ask the deference accorded his younger but more experienced brother, and the old practitioner who neglects to keep posted will degenerate into a "granny."—P.

"Hay Fever and Asthma."

A PERMANENT CURE BY MEANS OF NASAL SURGERY.

This is the title of a paper recently read by Doctor Floyd S. Muckey, of Minneapolis, before the Minnesota Valley Medical Society, and later published in the *Northwestern Lancet*. It deserves a better fate than that which befalls most magazine literature. The writer speaks from a wide experience and in most positive terms. If his claim is to be verified by experience it should not be overlooked or forgotten.

There are several points made which would seem to be incontestible. The first is that pressure upon the terminal filaments of the nasal nerve is the primary cause of these diseases; this pressure being the result of some abnormal condition in the nose, such as hypertrophied mucous membrane, exostoses, tumors, etc. The irritation set up by this pressure is reflected, by means of nerve anastomosis, to other organs of the body, giving rise to the various disagreeable manifestations found in asthma and hay fever. The principal of these are the difficult breathing, sneezing, coughing, and the congestion and itching of the mucous membrane

lining the nose, eyes, pharynx and larynx. The writer gives as a corollary to this leading proposition that the removal of the nasal disease and the consequent relief of the pressure will cause the disappearance of the disagreeable symptoms above mentioned. As a second corollary he states that the failure to cure these diseases denotes the failure, on the part of the rhinologist, to recognize and remove the abnormal conditions in the nose. This in turn is due largely to the inability of the physician to discriminate between healthy and diseased mucous membrane. In regard to this point the doctor writes: "Are the causes so different in any two cases that the procedure which will relieve one will not relieve the others? I for one cannot think so. If this be true, the whole science of medicine and surgery is chaos and treatment is a mere matter of guess work. There must be general principles which underlie the development and course of every disease, and these principles point out with absolute certainty the plan which must be followed to cure it. The principle which underlies hay fever and asthma is pressure on nerve filaments and the treatment, to be rational, must be directed to the relief of this. I believe that the failure to cure asthma and hay fever may be attributed to the facts that the rhinologist has not properly discriminated between healthy and diseased mucous membrane. I am free to confess that my failures in the past have been due to this cause." The writer seems to have struck here the keynote to the failure to cure disease. Either the true cause has not been discovered or, if so, it has not been removed, owing either to the nature of the cause itself, or to the incapacity of the physician. In the present case the true cause would seem to have been discovered and as this is a removable one, the failure to cure must be laid at the door of the operator.

Another important point which the author makes relates to the manner of removal of the hypertrophied mucous membrane. This is accomplished ordinarily by the use of the galvano-cautery. The author condemns the use of this agent in unmeasured terms and it would seem with good reason. He has substituted the use of the cold wire snare for that of the cautery, for the following reasons:

1st. Much of the hypertrophy is so located in the nose that it cannot be reached by the cautery knife, and hence a cure cannot be expected from its use. Hypertrophy in any part of the nose can be reached and removed by the cold wire snare.

2nd. The dead tissue caused by the burning is allowed to remain in the nose until by the process of sloughing it is thrown off. This causes a great deal of reaction and consequent distress to the patient. The author correctly terms this "a most unsurgical procedure." With the snare the diseased tissue is removed at the time of the operation. There is no sloughing, very little reaction and the relief is immediate.

3rd. The heat from the cantery knife destroys a certain number of mucous glands surrounding the burned tissue but not the membrane itself. The result is that when the wound has healed there is an area of mucous membrane which is devoid of glands a most undesirable condition. The wire of the snare being cold no such result ever follows its use.

4th. The swelling and consequent pressure following the use of the cautery often results in the development of fibrous bands across the nostril, a most troublesome condition. This has never been seen to follow the use of the snare.

5th. Diseased tissue can be removed much more rapidly and much more accurately with the snare than with the cautery, hence the length of the whole treatment is greatly shortened.

These points all seem to be well taken and ought to make many of the self-styled rhinologists hesitate before continuing the present wholesale burning of the nasal mucous membrane.

Another important point made in this paper, and one which the patient will be sure to appreciate, is that with the use of cocaine and adrenalin there should be no pain or hemorrhage, as a result of any operation. Rough handling of so delicate an organ as the nose is to be deprecated as it certainly does harm and delays the desired result as well as being very disagreeable to the patient. The long suffering catarrhal subject will welcome the statement that this is not necessary. The author concludes with the following statement:

"From the foregoing considerations some very important conclusions may be drawn. The first is that hay fever and asthma are curable diseases, and in fact are much more amenable to treatment than nine-tenths of the ills to which human flesh is heir. That this cure can be effected without recourse to the almost endless list of drugs and nostrums which are advocated for their relief from the "Liquor Ambrosia" of Curtis to the poisonous compounds of sedatives and alteratives sent out by the quack institutions which advertise to cure these most common maladies.

The second is that the use of the cautery in the nose in any form must be tabooed by the nasal surgeon as being a most unscientific and and unsurgical procedure."—G.

The Critique appears in new dress this year and volume, and makes a fine appearance. We congratulate brothers Smythe and Anderson.

The Cleveland Homoeopathic Reporter is now called The Cleveland Medical and Surgical Reporter. Dr. J. Richey Horner is editor, and Dr. H. D. Bishop, managing editor.

The American Homoeopathist has become The American Physician, and makes but twelve visits a year under the guidance of the "man with the ax," Frank Kraft.

This is the time for cogitation over the preparation of the dissertation to be read for the information and delectation of the aggregation of physicians who meet next May under the appellation of the Minnesota Institute of Homeopathy.—P.

NEWS AND NOTES.

The Minnesota State Homœopathic Institute meets in Minneapolis, May 21, 22 and 23, 1902. H. M. Lufkin M. D., St. Paul, president; Henry C. Aldrich, M.D. Minneapolis, sec'y

The State Medical Examining Board holds its examinations at the State Capital Building in St. Paul, the first Tuesday in January, April, June and October, C. J. Ringnell, M. D., Minneapolis, secretary. The homœopathic members are Adele S. Hutchinson, M. D., Minneapolis; Thos Lowe, M. D., Slayton and A. B. Cole, M.D. Fergus Falls.

The Minneapolis Homœopathic Medical Society meets on second Wednesday eve of each month; Henry C. Alrich, M. D., President; Adele S. Hutchinson, M. D., Vice-President; O. K. Richardson, M. D., Secretary.

Dr. C. G. Dwight, of Darlington, Wis., has been in Chicago visiting the hospitals.

Dr. Henry Richings, Rockford, Ill., has been appointed a member of the State Board of Health.

Dr. Frank Lackner, Leona, Wis., is examiner for the Ætna Life Insurance Company of Hartford, Conn.

Hahnemann Hospital, Chicago, received a \$10,000 Christmas present from Mrs. James Hoyt and Mrs. F. Newell, of Kenosha, Wis.

Dr. and Mrs. A. J. Hammond, of Winnebago City, are rejoicing over the advent of a girl baby at their home quite recently.

Dr. R. R. Rome and his good wife are receiving congratulations on the arrival of a boy baby at their house in this city not long ago.

Dr. J. W. Ward has been appointed a member of the San Francisco, California, Board of Health, being the first homœopathist to be so honored.

Dr. H. W. Roby, Topeka, Kansas, is secretary of the Medical Examining Board of that state.

Dr. Byron W. Miller, of Portland, is secretary of the Oregon Medical Examining Board.

Dr. Harvey B. Dale, of Oshkosh, Wis., not only excels as a physician and also as an editorial writer, but he has won additional honors as an exponent of philology, having been the winner at a spelling bee recently at his home town.

Dr. J. F. Beck is the proud and happy father of a beautiful boy, who was ushered into this vale of tears recently.

Dr. Hugh J. Tunstead has been appointed quarantine physician for the health department of Minneapolis, and has charge of the smallpox cases at the quarantine hospital and elsewhere.

At the meeting of the Minnesota Medical Examining Board on January 17th, licenses to practice in the state were issued to Drs. Geo. B. Cross, Nashua, Ia.; Nathan F. Doleman, Fergus Falls, and Harry E. Sutton, Minneapolis.

The Marine Hospital Service reports, for the last six months of 1901, show 17,496 cases of smallpox, with 575 deaths—while during the same period of 1900 there were 7,796 cases, with 137 deaths—about one-half as great a death rate.

Dr. H. H. Bingham has left Herman, Minn., and will locate in Minneapolis, being succeeded at Herman by Dr. Edwin F. Wayte, recently assistant physician at the Fergus Falls State Hospital, who, in turn, has been succeeded at that institution by Dr. Nathan F. Doleman, B. U. S. M., 1901.

Dr. Sarah Smith, of Council Bluffs, Ia., died at her home, Dec. 22d last.

Drs. C. H. Tisdale, Alameda, and J. C. Crawford, San Francisco, California, are U. S. pension examiners.

The Chicago Homœopathic Medical College has instituted a continuous clinical course for practitioners.

Dr. H. S. Roby, Merrilan, Wis., has gone to Chicago as interne at the Cook County Hospital and has been succeeded at Merrilan by Dr. Schofield, Hahnemann, Chicago, 'or.

Dr. C. S. Putnam, of Casselton, N. D., has moved to Fargo, same state, and has associated himself with Dr. Wm. McHarrie.

Dr. S. G. Cobb of Merriom Park, St. Paul, has opened a new private hospital at 2056 Iglehart street, which contains twelve rooms with sixteen beds, and a goodly number of trained nurses, an operating room that is thoroughly up to date in all its appointments. At a house-warming recently several hundred of the laity and medical profession to inspect the institution and enjoy the hospitality of Dr. Cobb, who was assisted that evening by Drs. C. G. Higbee, A. M. Eastman, Alex. Donald and F. L. Berkley.

Dr. W. F. Curryer, of Indianapolis, is secretary of the Indiana Medical Examining Board.

Dr. J. F. Kline, of Anoka, has been slightly ill recently, but is convalescent we are glad to report.

Our old friend Dr. L. M. Roberts, of Little Falls, Minn., was a recent Twin City visitor.

In considering trips abroad this coming year, remember the tours of Dr. and Mrs. H. S. Paine, of Glens Falls, N. Y.

Dr. C. M. Frazee has located at Bryant, Wash.

Dr. W. E. Pritchard has located in the city of Mexico at Espiritee, Santo. 1.

Dr. Geo. W. Smith has located at Omaha, Neb.

Drs. Clifford Mitchell, E. M. Bauce, E. G. Davis, Edw. Streeter and others have opened a laboratory for clinical diagnosis at 70 State street, Chicago.

Dr. Beck Meister, formerly of Ann Arbor, Mich., is lecturing on Materia Medica at the Chicago Homœopathic Medical College.

Dr. F. D. Curtis and Miss Almira Stone were married Oct. 30, at Fiske, Wis.

No doctor can truthfully claim to enjoy good health.

Dr. L. A. Williams, of Iona, Minn., is a proud and happy father.

Dr. Harvey B. Dale, Oshkosh, Wis., has recently been slightly indisposed.

Dr. E. B. Taylor, Burlington, Wis., and Miss Lulu M. McDonald, Rochester, Wis., were married Nov. 21st last.

Dr. D. F. Sullivan, Frankfort, S. D., is a member of the Spink County Board of Health.

A homœopathic hospital is in prospect at Milwaukee, Wis.

Dr. Paul A. Higbee, of Minneapolis, while impersonating Santa Claus on Christmas eve at his home, had the misfortune to be badly burned on the hands and face by his costume taking fire.

In a recent number of the British Medical Journal a writer reports a case in which he successfully resected 8 feet, 4 inches of the small intestines in a boy of ten and cites some thirty-three cases where the extent of intestine removed varied from three inches to twelve feet. Of the cases ending in recovery the greatest length of intestine removed was eleven feet. Where six feet and more of the intestine are removed with recovery, the patient is subject to diarrhoea.

In the report for October of the chief sanitary officer of Havana, the statement is made that while October is usually the worst month of the year for the disease, the number of deaths varying from 25 in 1899, to 240 in 1896, this year the month was passed without a single death or a single case developing. In 1900 there were 308 cases with 74 deaths. This year, since February, all mosquitoes have been killed near any focus of contagion and all houses where the disease showed itself have been thoroughly disinfected.

Dr. Edwin H. Smith, of Bemidji, was a recent welcome caller.

Dr. J. D. Kaufman has located at State Center, Iowa.

Drs. Hanby and Treat, of Sharon, Wis., have been attending clinics in Chicago this fall.

Dr. C. M. Beebe, of Denver, Colo., has given up gynecology and surgery, and will devote himself to diseases of the nose, throat and chest, henceforth.

At the January meeting of the Minnesota Board of Medical Examiners, licenses to practice were issued to Drs. Geo. B. Cross, Chicago Homeopathic Medical College, 1901, Nashua, Ia.; Harry B. Sutton, Minnesota University Medical Department, 1901, Minneapolis, Minn., and Nathan F. Doleman, Boston University School of Medicine, 1901, Fergus Falls, Minn.

Recent changes in the faculty of Hahnemann College of Chicago are the addition of Dr. W. M. Thompson to the chairs of Anatomy and Gynecology, Dr. C. J. Swan has been made full professor of ophthalmology, Dr. C. E. Kahlke professor of surgery, Dr. R. L. Snow professor of anatomy, Dr. W. O. Forbes professor of physiology, Dr. G. T. Smith professor of chemistry, and Dr. B. D. Hazeltine senior professor of anatomy.

Dr. Howard Crutcher has been appointed surgeon to the Chicago & Alton R. R. We congratulate both Dr. Crutcher and the railroad.

The man who thinks he knows it all
Is never taught to know
That he may know an awful lot
Of stuff that isn't so.

The monobromate of camphor is suggested in acute nasal catarrh.

The injection of moderate amounts of tincture of iodine (from one to four drams) or of carbolic acid (from twenty minims to one dram) will cure about eighty-five per cent of the simplest forms of hydrocele.

If a man kiss thee upon one cheek, turn to him the other also. So shines a good deed in a naughty girl.

Dr. Glen R. Matchan has located at Maynard, Minn.

'Tis a mean door that hath no keyhole.

Poets are born, not maids.

Of two devils, choose the prettier.

Accessions will happen in the best regulated families.

It is always the expensive that happens.

One touch of nature makes the whole world blush.

Dr. H. H. Bingham, formerly of Herman, Minn., has located at 3712 Grand avenue south, Minneapolis, with an office at 918 Guaranty Bldg.

The Seventh Post Graduate Course in Orificial Surgery by E. H. Pratt, M. D., will be held in the amphitheatre of the Chicago Homœopathic Medical College, corner Wood and York Streets, Chicago, Illinois, during the week beginning with April 28 1902, having a four hours daily session. Doctors invited to bring obstinate cases of every variety of chronic disease. For particulars address

E. H. PRATT, M. D.,
100 State Street, Suite 1203,

Chicago Illinois.

The governor of Wisconsin recently vetoed the Collins compulsory vaccination bill. He gave as his reasons for so doing that such a law was repugnant to many good citizens and that he did not believe existing conditions demanded it.

Kleptomania is a touching affection.

Barcelona, Spain, has two homeopathic journals.

The courts of Alabama have ruled that osteopaths must secure medical license in that state.

Dr. T. C. Duncan is out of Dunham College.

Dr. Paul F. Munde, of New York City, died recently.

Gov. Van Sant recently appointed Dr. Adele S. Hutchison, of Minneapolis, to succeed herself on the State Medical Examining Board. Dr. A. B. Cole, of Fergus Falls, to succeed Dr. W. W. Drought, and Dr. C. M. Cannon, of St. Anthony Park, who is the first eclectic physician appointed on the board.

Dr. H. M. Dawbarn, New York City, has been awarded the S. D. Gross prize of \$1,000, by the Philadelphia Academy of Surgery, for his daring operation of ligation of the external carotids in cancerous disease of the head. Dr. Dawbarn reports a case of a man with cancer of pharynx—alive and in good health seven years after being operated on.

Dr. S. F. Shannon, Denver, Colorado, has resigned from the State Medical Examining Board, and the governor has appointed Dr. D. A. Strickler, formerly of St. Paul, to succeed him.

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No. 4

Tonsillitis.

GEO. E. CLARK, M. D.,
STILLWATER, MINN.

Professor Theory and Practice of Medicine: Medical Department University of Minn.

Between the anterior and posterior palatine arches on either side of the throat are situated two glands. Amygdala they were called by the ancient anatomists, from their resemblance to an almond. Though diminutive in size, they have been the seat of more suffering than almost any other organ of the body. Not content with the afflictions pathological, most various and oft recurring that dame Nature from prehistoric times has imposed upon these faithful sentinels of the pharynx, the arts of man, scientific and otherwise, have been called in to subjugate or otherwise exterminate these fancied sources of such a vast deal of trouble. Hence they were cauterized with hot irons, burned with caustic and astringent lotions, amputated, lanced and torn. Still the trouble would and did return, and scientific men wondered why, or composed themselves with the assertion that all had been done that could be done. In no field is the futility of the recognized heroic treatment and the immense superiority of pure homœopathy shown to better advantage than in the treatment of this frequent and painful affection. But, mind you, I say pure homœopathic treatment. I wish unhesitatingly to declare against caustic and astringent applications to the throat, gargles, steaming and all the local paraphernalia frequently employed, as harmful and irritant in their action, and not to be compared with the single and indicated homœopathic remedy. Nor can you accomplish the best results with remedies below the 3x (preferably higher) or in alternation with other remedies, or too frequently applied.

I will state it as my belief that, with very rare exceptions, tonsillitis or quinsy should not proceed to suppuration under skillful homœopathic

treatment, and further, that patients subject to frequent attacks can be cured of such tendency, or if appearing, promptly held in check. I will illustrate:

Case.—Miss S., aged 23. A brunette. In fair health, with the exception of a frequently returning tonsilitis—often on one side, then on the other. She is a great sufferer from this cause in the spring and fall of the year. Both tonsils have been amputated, frequently lanced and local applications without stint have been resorted to with little avail. The attacks return as often and always proceed to suppuration. In the midst of such an attack, the new homœopathic doctor who had just come to town was resorted to in the hope that something more might be accomplished than had as yet been reached. I found both tonsils so swollen as to nearly occlude the passage into the throat. The attack was lessened in time and severity, and the left side prevented from suppuration. The right broke soon after commencing the treatment. The promise was made at that time that the chronic enlargement of the tonsils would be reduced by internal medicine—a great surprise to them—and that these attacks could be prevented from returning. Only once after that did the attack reach any severity, and then suppuration did not take place. She had frequent occasion to resort to the medicine on the appearance of the first symptoms of a recurrence, when the trouble would promptly disappear. The size of the tonsils was also greatly reduced.

A brother of this lady, similarly afflicted, scoffed at the virtue of “little pills,” and continued to suffer from his periodical attacks.

This is an illustration of a frequent experience under homœopathic care—it can continue to be repeated over and over again.

Definition.—Acute inflammation of one or both tonsils—tonsilitis.

Synonyms.—Amygdalitis, quinsy, cynanche tonsilaris, angina tonsilaris.

VARIETIES.

I. Simple Catarrhal.—Of mucous membrane, covering the tonsil and usually extends to pharynx.

II. Follicular.—Catarrhal inflammation of the follicles lining the lacunae, or indentations of the tonsil. Inflammation deeper than in No. I and produces a thin whitish deposit on the tonsil.

III. Parenchymatous.—Inflammation of the substance of the gland—liable to result in hypertrophy or abscesses.

IV. Peri or retrotonsilar Abscess.—Most frequently between the tonsil and the anterior palatine arch, when abscess from it is commonly known as quinsy.

ETIOLOGY, PREDISPOSING AND EXCITING.

I. Age.—Youth; most common between 15 and 25.

Heredity.—Strumous diathesis.

Previous attacks with resultant hypertrophy. Sympathetic relation with other organs. Dyspepsia. Menstrual irregularities. Uterine disturbances. Rheumatism. Gout. General ill health. Lithic acid diathesis.

II. Exposure to Wet and Cold.—Especially wet feet.

Bad hygienic surroundings; bad drainage and sewer gas, etc.

Season of the Year.—Cold and damp—March. Irritating vapors or fluids swallowed. Rheumatism.

Complication.—Appears as a complication in scarlet fever, measles, and smallpox.

Symptoms.—Malaise, chilliness, fever, which will run very high, 103° or 104° in all but the first variety. Stiffness and dryness of the throat. Swelling of one or both tonsils; impossibility of swallowing, talking or opening the mouth. Speech if at all is of a very thick and guttural character and often interrupted by the endeavor to swallow. All these symptoms are increased in the suppurative form.

On the tonsil may appear a thin, whitish exudation—not extensive and generally in patches. Breath feverish and offensive. Tongue covered with a thick white coating. Anorexia and constipation.

Duration.—Of the simple or superficial and follicular is usually from 3 to 8 days. The parenchymatous and tonsilitis with abscess last from 8 to 10 days and even 3 weeks.

Differential Diagnosis.—From diphtheria. In tonsilitis the prostration is not as great; the fetor of the breath not as rankly offensive. The membrane is thinner in spots and confined to the tonsil. The fever is higher and pulse more full and bounding. From Scarlet Fever and Measles by the rash.

Remedies.—Apis. Stinging, burning pain when swallowing. Dryness in mouth and throat. Red, highly inflamed tonsils, oedematous swelling of fauces and glottis. Fears open air yet cannot stand a warm room. Thirstlessness. Dysuria.

Baryta c.—Liability to tonsilitis after slight cold. Or suppressed sweat of feet. Tonsils tend to suppurate, especially right side.

Bell.—Especially right side, parts bright red; also swelling of the neck externally, painful to touch and motion. Constant inclination to swallow. Cerebral symptoms.

Hepar s.—Where there is a frequent recurrence of the disease. Sticking pain as from a fish bone in the throat when swallowing. Sensation as of a lump in the throat. Inclination to suppurate. Persons of a scrofulous habit. After the abuse of mercury.

Lach.—Tonsilitis, especially on left side. When swallowing pain extends to the ear. Fluids escape through the nose when being swal-

lowed. Sensation as of a plug in the throat. Cannot bear anything to touch the neck not even the bed clothes. Worse in the afternoon, after sleep and hot drinks.

Lyc.—Tonsils enlarged; indurated and studded with many small ulcers, swelling and suppuration of tonsils, going from right to left; chronic enlargement of tonsils. Flatulent rumbling and distension of the abdomen. Aggravated after 4 p. m. from cold, food and drink.

Merc.—Tonsils swollen, inflamed and dark red or become ulcerated. Offensive odor from the mouth. Aphtha or thick yellow coating on the tongue. Violent prickling pains when swallowing extending to the ears or the glands of the throat. Gums and the back part of the tongue swollen. Profuse discharge of saliva. Much perspiration which does not relieve. Aggravation during night.

Phyt.—Pain at the root of the tongue or to the ears when swallowing. Much dryness of the throat with soreness, fauces and tonsils appear dark, perhaps of a bluish cast. Cannot drink hot fluids.

Sul.—When there is a frequent recurrence of the disease. After suppuration the parts remain sore and do not heal readily. Scrofulous persons who are troubled with boils. Every little scratch of the skin has a tendency to fester. Lean persons who walk stooping. Frequent weak spells.

The beneficial action of the indicated homœopathic remedy in removing the tendency to a recurrence of this trouble will be well illustrated in the following severe cases and also show the action of two of the most frequently indicated remedies.

Case I. Frank B., aged 23.—Dark hair, eyes and complexion. Had a very severe attack of diphtheria when 11 years old. Following this had tonsilitis once a year till 18 years old. Up to this time he had been under homœopathic treatment. For the next four years was under allopathic care. During this time treated with gargles, washes and the usual methods of that school, but managed to get in about two attacks a year, lasting a week or more. It did not usually suppurate, but did occasionally. What science or value can there be in such treatment, when it runs its course undisturbed and meets its periodical engagements, with no improvement in severity or lessening in liability or frequency of recurrence?

Very wisely so concluded the patient on Nov. 22nd, 1890, on the occasion of his last and most severe attack with which he had as yet been afflicted. Inspection showed the throat bright red and a general diffuse inflammation. Bell. was prescribed at that time.

Nov. 26. Four days afterwards was again called and found the throat very much worse and gave an unfavorable prognosis as to supuration. The left side was much more swollen now, with shooting pains up into the left ear on swallowing. The throat was much swollen on the outside and very tender to the touch. Three powders of Lach. were given to be taken every half hour, to be followed by sac. lac. in water.

Nov. 27. Next day some improvement. Continued the Sac. lac.

Nov. 29. On the second day not as well. Repeated the Lach.—one powder. In the next two days recovery was so well established I made no more visits. Suppuration did not take place.

The recovery was prompt and permanent. Never having suffered an attack since for some 8 years now. A word on the potency question. You cannot get such deep permanent action from your remedies as above cited in the lower potencies.

This case had been treated homœopathically just before it came into my hands, but with the lower potencies. But no such permanent result followed as did result on the very first application of the higher potencies.

Our enemies may ridicule and unbelievers scoff at the value of the high potencies—and make all manner of wise assertions about the impossibility of their virtues, but a little personal experience—a few facts are worth a thousand bombastic assertions—try it yourself ladies and gentlemen and know these facts for yourself.

Case II.—Another case will still further illustrate the same points, viz., the power of homœopathic medicine to remove long standing troubles and show their ability to promptly, safely, thoroughly control a severe attack, as well as to remove the tendency to return. It will also emphasize the danger of local applications in suppressing the external manifestation and causing it to remain in the system for years as a constitutional trouble. This fact is not understood as it ought, even among the homœopathic profession. I repeat again that gargles and all local applications to the throat in both tonsilitis and diphtheria are injurious.

Case III.—Mr. B., aged 43, of nervous, sanguine temperament and scrofulous disposition. A farmer by occupation. Several years ago had diphtheria. A neighbor loaned a prescription which consisted of a gargle and a wash to kill the membrane. For this purpose the family would stand over him and apply as often as the membrane would appear. Such attacks were repeated for seven different times, till the wash would no longer work and his life was despaired of. Under medical care, how-

ever, he survived only to be followed by frequent attacks of tonsilitis—at least from one to two each year.

Jan. 20, 1900. I was called through a blinding snowstorm five miles in the country to visit this man. The attack had lasted over a week. Had been under allopathic care, but the case becoming much worse and the suffering intense. Homœopathic treatment for the first time was resorted to. Found the patient restless, walking the floor constantly and groaning with the pain. Had not slept a wink for last three days. The swelling was so great both internally and externally the jaws could not be pressed open to gain a view of the throat. Patient and friends insisted on having the throat lanced for immediate relief. No confidence was placed in my statements that I would give more prompt and permanent relief by internal medication. But as the mouth could not be pried open I had my own way. The only points that could be gained was the history of such cases. This as all other previous attacks commenced on the right side and thence extended to the left. The left was now most swollen and painful, but the first appearance was the fact sought for. There was pain in the back, thirst for cold water. This is all that could be obtained. One powder of Lyc. cm. was dissolved in a swallow of water and given to the patient to drink. One other powder was given to be taken in the morning if no better. Meantime Sac. lach. was taken in water, to be repeated every half hour when awake. This was about 6 p. m. Within a half hour a coughing spell occurred when a chunk of thick, hard mucous as large as a small finger came up. Immediate relief resulted. Could swallow and breathe easier and the pain abated. The patient laid down and slept till morning. The swelling disappeared in three or four days and the recovery was complete. For never from that day till this, nearly eight years now, has there been a return of the trouble. If a more prompt, beneficial or undoubted result of internal medication is demanded by our opponents, we must accuse them of blinding the eyes and refusing to believe plain facts.

Osteopathy.

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Osteopathy is a branch of the healing art that has come into existence through the neglect of manual therapeutics by the medical profession.

It is more than massage or Swedish movements, yet, to some extent, there is an overlapping of all methods of manual treatment.

Osteopathy differs from massage in its underlying theory as to the origin of disease more than in its method of treatment.

The theory of the osteopath is that there must be a perfect nervous control and blood supply to all parts of the body. As the nerves control the supply of blood and the function of the organs, unless there is a physical interference, the osteopath gives most of his attention to the nervous system, and consequently to the alignment of the spinal column as the spinal cord is the next in importance to the brain.

The term lesion as used by the osteopath is not generally understood by the medical profession. When an osteopath speaks of a lesion of the spine he does not refer to a gross dislocation but a subluxation of the vertebra so very slight that it would, in many cases, be overlooked unless taught to know its importance.

I have heard the argument that the vertebra could not be dislocated without immediate disastrous results and I have seen a fresh vertebral column with all the ligaments intact placed in a vice and an attempt made to twist a vertebra, and fail. Yet I know that rotation without curvature as well as rotation with curvature of the vertebra, and no Pott's disease present, take place in the living body. A vertebra, or generally there are three or four, may be too far forward or backward to maintain the normal curves of the spinal column.

The argument is also given that the spinous process of the vertebra is very apt to be deflected and thus mistaken as a rotation. True, this is a mistake that might be made, and no doubt is often made, but if careful examination is made the confirmatory evidence of a subluxation would be absent in such a case.

The intervertebral foramen is not so very large, yet it contains ligaments, spinal membranes, spinal nerve, blood vessels and, in some, a portion of the ganglia. The foramen is well filled, a slight rotation of either vertebra forming the foramen will cause the articular process to encroach upon the space of the foramen and thus make a pressure upon the contents.

The injury may have been years before, in fact, in the majority of cases the primary lesion occurred at least twelve months prior to the time the case presents itself for treatment.

The pressure may be very slight, so slight that the full function of the nerve is not disturbed, but the continual pressure will in time cause a diseased condition to develop in the organ to which that nerve is distributed.

It is not at all uncommon for osteopaths to get the history of stomach or intestinal trouble developed after a wrench of the back.

In obstetric practice in cases where there is a faulty involution of the uterus after a labor, an examination of the back will generally disclose some lesion of the vertebra in the lower dorsal or upper lumbar re-

gion, generally the lumbar curve is partially or completely obliterated, the column in some cases even has a curve outward. In this region are the spinal centers governing the nerve and blood supply of the uterus.

Contractions of the muscles along the back will reflexly cause a disturbance of function of the organs supplied by the nerves from that region or a reflex from a diseased organ through the cord and out to other organs, or the pain, congestion and contraction of the muscles of the back may be caused reflexly from the organ primarily.

The osteopath pays very close attention to the sympathetic system, as he recognizes that a disturbance of one organ may cause reflexes to many others, but principally in the line of least resistance and over well defined paths, well known to all physicians.

The osteopath admits that contagious diseases may be caused by germs and that all means should be taken to prevent the spread of the infection.

They also believe if there is a perfect nerve and blood supply the body will have much greater resisting powers and will be able to overcome an ordinary attack of germs. To illustrate the osteopathic idea: If a person has a lesion, either muscular or bony, in the middle or lower dorsal region, affecting the nerve and blood supply of the small intestines, the resisting powers of the intestinal tract is very much lowered. If this person drinks infected water the germs are very liable to find lodgment and the disease inaugurated.

The osteopath, in treating such a case, guards the diet, keeps the fever down by the use of water and manual therapeutics (the method to be described in another paper) and tries to get a free circulation through the infected area. He also takes all sanitary precautions and meets emergencies as they arise.

In the administration of a treatment to a patient, able to be out of bed, the patient, if a woman, lays aside all tight fitting garments and puts on a loose gown. The time required is from a few minutes to half an hour, depending upon the extent and character of the disease.

The arms and legs are used as levers, the lower portion of the body used to rotate the upper portion of the vertebral column, etc., the aim being to overcome all contractions and subluxations, to stimulate or inhibit the nervous systems as the case indicates.

Very frequently the first treatment, or the first part of a treatment, is simple massage used to improve the circulation of an organ or area, as, for example, massage of the abdomen is generally combined with the regular osteopathic treatment to overcome the bony or muscular lesion of the back or the replacement of displaced organs for the cure of constipation.

In speaking of centers in the spine, the osteopath does not necessarily mean a group of cells controlling a certain function are located at that point in the cord, but there are nerves entering or leaving the cord at that point that control or supply certain organs. If there is a group of cells then the control of the organ is much more complete.

Inhibition of a spinal nerve is accomplished osteopathically by pressure on the posterior division of the nerve, the depressing influence is reflected to the anterior division and thus to the organ. Stimulation is accomplished by more or less rapidly pressing and relaxing over the posterior division of the nerve.

Some of the more prominent and important centers are as follows:

1st. Cervical—Eye, ear, vasomotors of head and face, depressor of the heart.

2nd. Cervical—Vasomotors of the head and face, pharynx and tonsils.

3rd. Cervical—1, 2, 3, 4, cervical influence of the larynx.

4th. Cervical—2, 3, 4, 5, 6, cervical diaphragm, on the right side of the liver.

5th. Cervical—It is claimed by some osteopaths that a lesion at the 5th and 6th cervical influences the vasomotors of the entire body.

7th. Cervical—Accelerator of heart action, thyroid gland.

1st Dorsal.—Cilio spinal center, accelerator of the heart.

2nd Dorsal.—Cilio spinal center, lungs, accelerator of the heart.

3rd Dorsal.—Lungs.

4th Dorsal.—3, 4, 5 dorsal, stomach, if there is a lesion on the right side of the column correction of the lesion or inhibition over this area will usually stop vomiting if the vomiting is due to a reflex from some other organ.

6th Dorsal.—6th, 7th, 8th, 9th and 10th dorsal govern secretion and peristalsis of the stomach and small intestines.

8th Dorsal.—8th, 9th and 10th dorsal on right side center for liver.

9th Dorsal.—9th and 10th dorsal on left side center for spleen.

10th Dorsal.—10th, 11th and 12th dorsal and the 1st and 2nd lumbar center for uterus or prostate gland.

11th Dorsal.—Head of large intestine, kidneys, ovaries or testicles.

12th Dorsal.—Same as the 11th.

1st Lumbar.—Genito-spinal center.

2nd Lumbar.—Parturition, micturition, uterus or prostate gland.

3d Lumbar.—3d, 4th and 5th lumbar sigmoid flexure and rectum.

5th Lumbar.—Ovaries, tubes and uterus or testicles, spermatic cord or prostate.

1st Sacral.—About the same as the 5th lumbar.

2nd Sacral.—2d and 3d sacral to the bladder.

4th Sacral.—4th and 5th sacral to the sphincter ani and rectum.

Coccyx.—Sphincter ani.

The vasomotors of the upper extremities may be affected by a lesion as low as the eighth dorsal and the lower extremities by one as high as the fourth dorsal.

Pneumonia following La Grippe.

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Probably one case out of every twenty cases of la grippe as they come, and possibly one case out of every ten, in people after the age of fifty, suffers from pneumonia after being thoroughly infected with grippe. In these latter cases the danger is great and the percentage of mortality is enormously high. The cases seem to go from bad to worse, and do what one may, as a rule, the cases terminate fatally.

The chief difficulty seems to be with the pneumogastric, as the heart beat gets very rapid, and consequently weaker, and the ciliated epithelium of the bronchia becomes so insensible as not to throw off the mucus as it accumulates, thus interfering with the proper aeration of the blood, and all oxidization and proper metabolism. The question of the hour is, what shall we do to save them when we get patients like these? Of course we must apply the indicated remedy as nearly as possible, and if it is sufficient, all well and good, but it sometimes happens that no difference how well we seem to have the symptom group matched by the remedy, we do not "get the answer" we seek. Or if we get a partial result the entire case does not clear up as we should like, and there is a trace of a cough left, and the patient becomes rapidly tired and exhausted on slight exertion, and perspires easily with sweats at night, which they call "night sweats," and immediately jump to the conclusion that something worse is coming, i. e., phthisis, and in a number of cases unfortunately their fears are too well grounded. Although psor. calc. c. and byro. may cover the cough and sweat symptoms, and digitalis the heart symptoms, the nutrition seems to suffer. Some artificial food or chemical nutrient is often of the greatest assistance to our remedies in the way of adjuncts. Thus when a patient comes to the physicians with a hacking cough and is losing weight, and appetite poor, with sweats at night as soon as he goes to sleep, we "size up" his financial abilities and, if able, recommend that he go to the gulf coast of Florida, or southern California, near the coast, to avoid "colds" from frequent changes of temperature, and where they can stay out of doors practically all the time. But in case the change of climate cannot be had, then the patient must be instructed to avoid as much as possible sudden variations of temperature, and promote the general nutrition of the body as much as possible.

As a means to that end in addition to whatever the patient will eat and can digest of ordinary food, the exhibition of codliver oil preparations after meals for several weeks is productive of good results.

On account of the presence of all the active principles of codliver oil, nutrition seems to begin again with its pristine vigor; flesh is taken on and the impending calamity is averted.

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A Cut Throat.

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Interne at City Hospital,

On the Monday before Christmas last, T. H., Scandinavian, aged 21, who had been married but five weeks, came home from work shortly after six o'clock and, finding his wife not at home, gave himself up to a delirium of jealousy. The wife not having returned by seven o'clock, he took his razor, threw himself on the bed, cut his throat, and when discovered at 7:30 o'clock, was, to all appearances, lifeless, his heart having practically stopped beating, owing to the excessive hemorrhage.

Immediately the City Hospital was communicated with, and the police department patrol wagon coming for him, he was hurried to the City Hospital; the case going to the homeopathic side, the surgeon on duty, Dr. Henry C. Aldrich, was notified and arrived at the hospital at eight o'clock, just a moment or two after the arrival of the patient. At once, upon his arrival, the patient was placed on the operating table in the patrol room, where all emergency cases are brought. I began the administration of normal salt solution by hypodermoclysis. And immediately upon Dr. Aldrich's arrival, he ordered the normal salt solution injected into the veins and, opening the median basilic vein of the right arm, he introduced over two quarts of the artificial serum. It was marvelous to note the change which came over the face of the patient as the warming and live-giving solution entered the circulation.

In a few moments blood began to pour from the external jugular vein of the left side, which had been severed by the razor, and it was necessary to ligate it and all other bleeding parts, catgut being used.

After the introduction of the normal salt solution, the patient's neck was cleansed as thoroughly as possible, under the circumstances, and an examination revealed the fact that the larynx had been cut completely through into the œsophagus. Catgut was used to approximate the edges of the wound in the larynx and also the several layers of the fascia of the neck, and interrupted sutures of silk worm gut were used to close

the incision in the skin. Because of the great probability of infection having occurred, capillary drainage was made by using several strands of silk worm gut.

The case progressed to complete recovery with only a slight elevation of temperature, 101° or 102° Fahrenheit, which developed on the second or third day and continued for about forty-eight hours, due undoubtedly to a slight infection at the angle of the wound of the left side.

The drainage was removed a few days later, and the man was discharged cured and in good condition, about seventeen days from the time of his arrival at the hospital.

A most gruesome incident during the operation, which was done without an anesthetic, was to hear the voice of the man proceeding from the wound while we were closing the larynx.

On leaving the hospital he expressed himself as greatly pleased with the result of our operation. And in reply to the question "if he would attempt to kill himself again," said, "No, I have had enough of that."

Sexual Education.

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It seems a perverse fact in human nature that matters of the most vital importance are often the most neglected. Facts which have to do with the well-being and future happiness of the individual are left to assert themselves as they may, and, like "Topsy," they simply grow up.

The greatest factor in all animal life is the instinct of procreation which lies in the sexual function. In the human being this factor has much to do in shaping the life of the individual, both as to his conduct toward himself and toward others; in civilized life it is the dominant factor of all altruistic and æsthetic feelings. It is the foundation of all that is good and true and holy in the individual. It is the all-powerful conservator of the human race, human happiness and human virtue. Notwithstanding the fact that all this is true, the boy or the girl growing into youth and maidenhood is very rarely told anything concerning the sexual function and sexual desire, and when these manifest themselves they are afraid to speak of them because there is an inborn instinct that such matters should not be talked about. Gradually, however, they will learn from others of their own age something of these conditions, and, more often than not, the knowledge so obtained is of more harm than good. With the girl her sense of modesty is so great that when she has any sexual manifestations she tries to repress them, thinking they are sinful, and that she is the worst of all sinners because she allows even the thought of such things to obtrude itself upon her.

Kraft-Ebing most beautifully describes the purpose of the sexual function in these words:

"The propagation of the human species is not committed to accident or to the caprice of the individual, but made secure in a natural instinct which with all-conquering force and might demands fulfillment.

"In the gratification of this natural impulse is often found not only sexual pleasure and sources of physical well-being, but also higher feelings of satisfaction in perpetuating the single perishable instinct by the transmission of mental and physical attributes to a new being.

"In coarse, sensual love, in the lustful impulse to satisfy this natural instinct, man stands on a level with the animal, but it is given to him to raise himself to a height where this natural instinct no longer makes him a slave. Higher, nobler feelings are awakened, which, notwithstanding their sensual origin, expand into a world of beauty, sublimity and morality."

These words explain most fully the whole sphere of sexual life.

It is the interpretation of the meaning of the sexual instinct that causes so much misery in the world. Because there is that sense of physical well-being which results from sexual congress, mankind at large believe that such an act is necessary to the perfect health of the individual. It is true that the sexual desire is greater than all other animal instincts, and its gratification gives more pleasure when prompted not only by the animal instinct, but also by the higher physical influence of true love for the person loved. The union of the body and the soul which occurs under such conditions is the most holy, sacred and blissful of all human passions.

Such is the higher ideal of the sexual act in the civilized human being which the uncivilized man knows nothing of. Whenever the sexual act is undergone simply for sensual pleasure and the gratification of the animal instinct, it becomes debasing and degrading, and lowers the moral tone of the individual as nothing else can; and yet physicians teach and preach to the majority of their young men patients the necessity of the gratification of this instinct wherever it may be had. Now, is such a gratification necessary for the health of the individual? I say most emphatically no, and I am supported in my opinion by that of the most prominent neurologists of the day.

Gowers distinctly says that continence should be taught young men. Osler, in speaking of venereal diseases, says physicians have two important duties: the preaching of continence to young men and scrupulous care in every case. How many physicians follow out the first.

In a most excellent article in the North American Journal of Homœopathy, in the February, 1901, number, on the Bosschiter case, the editor closes with these words:

"There is nothing incompatible with health in continence; the sexual function was given to fulfill a higher purpose: the pro-creation of the species. Its illicit performance, whether in a natural or in an unnatural manner, leads to moral and physical ruin."

It is through the belief that this instinct should be gratified for the sake of health that prostitution exists the world over; it is on account of this same belief that syphilis and all other venereal diseases create such havoc in the world today. To think of the misery that is impaled upon innocent beings on account of diseases contracted from some person who is accustomed to promiscuous intercourse is something horrible. The confiding wife, the innocent children born to endure a life of suffering, perhaps to become criminals—the untold misery is a picture too awful to dwell on. To show that sexual gratification is not necessary for health, we simply have to turn for a moment to the life we demand of our women. They live for years—yes, a whole life-time—without sexual gratification, and unless they too believe that such gratification is necessary for health, and allow that fact to disturb them, they are none the worse for their celibacy. It depends much upon the way in which the individual looks upon this matter as to whether continence does harm or not. Many and many a young man never gratifies his sexual desires until he is thirty, and over, and grows up strong and healthy because he has been taught from early childhood that such gratification is not necessary for his well-being; while, on the other hand, the average man is taught to believe that such is necessary, and he therefore gives way to his desires. What misery, what suffering is entailed thereby! Scarcely a man who gives way to promiscuous intercourse escapes without some form of venereal disease. The simple gonorrhœa, which has been supposed to be of no more consequence than a common cold, we find today that physicians claim is never really cured, and under such circumstances the individual himself is not the one to suffer most on that account, but his wife, innocent of all wrong, contracts the disease through him, and not only has the uncomplicated trouble, but a salpingitis or cellulitis, ovaritis, metritis or peritonitis, which, recurring many times, endangers her life and makes her an invalid all her days. Gynecologists know this well, but are good enough not to tell the unsuspecting woman the cause of her trouble, and yet the fact remains that the youthful indiscretion of the husband has caused her all this misery. The so-called social evil is licensed and allowed to exist because it is believed to be necessary; all kinds of laws have been enacted from time to time to suppress it; monarchs victorious in the field and unsurpassed in the council chamber have bent all their energies of will and brought all the aids of power to crush it out, but before these vice has not quailed.

Guilty women have been banished, scourged, branded, executed, and their partners have been subjected to the same punishment, and still prostitution exists. It is rare today to find a young man of twenty-five who has not gratified his sexual desires. His mother and his father wink at his youthful follies, because they say boys must sow their wild oats. I have heard fathers say, in speaking of their boys just growing up, that when they got old enough they were going to tell them to select some nice girl of their acquaintance that they might gratify their desires with her. Such damnable advice is offered only from his "Satanic Majesty." Does that father never stop to think of the trusting, confiding girl who gives herself to his son simply because she loves him, only to be turned off when the boy is through with her, because it was not the intention of either the father or the son to marry her? Does he never think of the life of misery that is left such a woman—and yet I have heard that from good men, men of standing in the community, men whose word means something. To be sure, many times the one who sows the wild oats reaps some sort of a harvest, but their harvest is often nothing in comparison to that of their partners. If the son is allowed to sow his wild oats, the girl who attempts to do the same thing is ostracised from society and cast out into utter darkness. Why such discrimination? Can you tell me why it is any worse for a woman to gratify her natural instincts than it is for a man? Can you tell me why there should be one code of morals for woman and another for men? There is no reason except that society has said that the boy is excusable on account of the strength of his natural instinct, while the girl, whose desires are just as strong, is compelled to restrain them. I suppose the reason of that is because it is the man who makes the laws.

Such then is the sexual condition of the world today, and it is so on account of the lack of sexual education. While there is no doubt that the man and the woman are both better off if their sexual desires can be gratified to a certain extent, yet, that such is absolutely necessary for the health of the individual, I deny. The only way that we can get rid of any vice is to first expose it and then educate the people against it. Legislation never yet changed any man's character; education may make a saint of a sinner, and education therefore is the only remedy for this vice, and the physicians are the ones who should educate the masses. The physician should teach the young man to control his animal instincts and make them subservient to him, that he may be the master, and not the slave.

There is another phase of this matter. The man has grown up to married life without ever having indulged in sexual pleasures before his marriage; and because he believes that such pleasures are necessary for

his health, he makes his wife submit to his advances at any and all times. If she be not well and resists, he forces her to submit to his demands; if she is weakened by excessive child-bearing, he even then still insists. I have had women time and time and again tell me that if they did not yield to their husband's demand night after night that he would threaten to leave them and the children. Is there any slavery on the face of the earth so terrible as that, and this, too, among educated people—people who would be expected to have more control of themselves than that and more consideration for their wives. I have told these women repeatedly that they have just as much control of their own bodies as any other property that they may possess, and the husband has no right to make any demands which they do not wish to accede to. If all women knew this, they would have less suffering than now, but unfortunately they do not; they believe that they must submit absolutely to the wishes of their husbands.

Physicians, then, must teach women this as well as the fact that men do not have to gratify their desires all the time, as they now suppose that they do. Sexual education should be taught in all medical colleges and in all high schools, boys being taught by men teachers and girls by women teachers, because it is found that parents will not teach their children anything concerning these matters. The physician, however, should insist that every boy and every girl under his care should be taught concerning sexual matters, either by himself or by the parents of the children.

This subject is such a vast one that I have been able to only touch upon a few of the essential points, but I have done this in order to awaken in you the necessity of sexual education for all of the people under your care. I have been led to do this by the editorial already referred to and to numerous articles and letters in other journals upon this subject.—*Pacific Coast Journal of Homœopathy.*

The American Institute of Homœopathy.

All arrangements are rapidly completing for making the meetings of the American Institute of Homœopathy in Cleveland a success long to be remembered. The local profession welcomes every member, and promises that in the matter of hotels, railways, entertainments and the like, no disappointment will be experienced. Every promise heretofore made will be fulfilled. One of the principal features of the week's meeting will be the coming together of the various college alumni, forming a grand College Alumni Association, who will have special rooms assigned them in the Hollenden Hotel, and, on one evening, be given the large assembly room in the hotel for the "round up," with general jollification, music, singing and speeches. On another evening a reception, ball and

banquet will be given at the Colonial Club on Euclid avenue. The usual first night opening services, addresses of welcome, president's address, etc., will be held in the Chamber of Commerce Building, where all the meetings of the institute will be held. The memorial exercises are also suitably provided for.

On Saturday the Erie Railway has tendered an excursion to Cambridge Springs, Pennsylvania, where the visitors will be the guests of the Hotel Rider. During June Cleveland is famed for its beautiful weather and its cool sleeping nights. It is justly called the "Forest City," with its miles and miles of paved and shaded streets, for driving, walking and bicycling—a boulevard system connecting its many beautiful parks and waterways, and an unparalleled system of trolley lines. The meeting place and the hotels are adjacent and in the very heart of the city, accessible to the railways, places of amusement, the principal stores, and points of interest. A cordial and most hearty welcome is extended to every homœopathic physician—and his wife—to meet in Cleveland this summer with the American Institute of Homœopathy, June 17 to 21.

Gaius J. Jones, M. D., Chairman of Local Committee.

SELECTIONS.

Human and Bovine Tuberculosis.

Dr. Dinwiddie, of the Arkansas Agricultural Experiment Station, gives forth some results of his work which will prove rather a settler to the extremists who affect to discover in bovine tuberculosis a fruitful cause of the disease as it occurs in man, a view which has resulted in the killing off by the state of many valuable herds of cattle. He says: "There are a large number of exaggerated statements going about, many of them from medical sources, that may seem to some justifiable in view of the real peril that exists and the need of popular education in regard to it. Their publication is not, however, scientific, and it is just as well to have our attention occasionally called to facts that seem to indicate that some of the expressed views may not be as scientifically accurate as the impression created by their utterance would imply. Tuberculosis is enough of a peril; its real dangers when stated are formidable enough, there may, therefore, be some little consolation in occasionally recognizing facts which indicate that in some ways and in some cases, the danger of infection may be less serious than some commonly-uttered statements would lead us to suppose."

It would certainly seem only fair that those who hold that tuberculosis is communicable to the human being by the eating of the flesh and the drinking of the milk of the infected animal, should fortify their position by the report of cases in which the relation between the effect and the alleged cause can be clearly traced. Their literature is certainly very lame in this particular. Since the writing of the above, Koch has (at the Tuberculosis Congress in London) declared himself unequivocally in support of the opinion expressed by Dr. Dinwiddie.

The Pathies.

Pardon the metaphor, but it is a foolish virgin who sees naught of good in any pathy—osteopathy, psycopathy, homoeopathy, allopathy, hydropathy, thermopathy, kinesopathy, seropathy, etc. The wise virgin, whose lamp is trimmed and filled with oil, ready always to receive the bridegroom of truth, ready always to flash its light into the dark places, sees differently. There is not one of these pathies in which this light does not reveal something of good—something which the scientific physician may and does avail himself of to the betterment of his function as a co-worker with nature in her beneficent plans. He knows that no one of them nor all of them together contain all their is of therapeutic truth and his fight with them is waged because of their assumption of being the “whole thing” in the process of curing disease. In the complex physiological processes of which the pathological are but a disturbance, there are elements which have not yet been discovered, and it is reasonable to believe that there are to come other pathies than the many which have been exploited which shall also contain germs of the truth. In the gradual unfolding which is going on the arcanum is becoming clearer and clearer. In the coming time, too, man’s faculties will be stronger and his perceptions more acute and the light which already exists and which is still to be generated will open up new vistas. The optimistic frame of mind is the better. Whatever is right and everything combines to the working out of the grand problem. Let us keep the mind free from prejudice, proving all things and holding fast that which is good in every pathy, but allowing none of them to dominate us. There is nothing too small to warrant the indifference of the true searcher for truth.

In a line with the above thoughts we reproduce the following from the *Northwestern Lancet* on the subject of osteopathy: What is the kernel of osteopathy? Simply that a more or less judicious movement of diseased parts cures such parts. This fact is demonstrated by the position of the Ling system of Swedish medicine, by the cures wrought among us by imported masseurs and their imitative rubbers, and by the popularity of osteopathy among the laity. What is the harm of it? The harm of it is its indiscriminate application as a “cure-all”—a system of cure—by its enthusiastic but poorly educated leaders. What is the profession doing to reclaim this lost territory to its own? With us the little done is left to the untrained or the imported. Nothing is done to popularize the method, and this remedy of undoubted therapeutic value is neglected in our smaller communities. The time is ripe and the ground is ready for a well-officered and well-equipped school of massage and physical culture.—*Therapy.*

Potassium Permanganate in Opium Poisoning.

Dr. Colderon (Pacific Medical Journal) adds to the testimony in support of the value of potassium permanganate as an antidote to opium in the system by a report of a case occurring in his practice. He first evacuated the stomach with a stomach pump and then washed the viscus with a 1:5000 solution of potassium permanganate, throwing in the solution until it returned rose-colored. About a gallon was necessary. Next he injected hypodermatically a syringe full of the solution in the strength of 1:20. After this a tablespoonful of a 1 per cent solution was given per os every hour. The salt oxidizes the opium remaining in the stomach, thus causing it to become inert, the resulting mangan dioxide being insoluble. Should the amount of morphine taken be known the potassium permanganate to be employed should be 5 times as great. Should the amount not be known a tablespoonful of a 1 per cent solution is to be given every hour, in addition to the syringe full hypodermatically of a 1:20 solution. Should laudanum have been the form of opium taken four grains of the salt should be given for every ounce of the narcotic.

Spinal Cocainization.

This method of producing anaesthesia of all structures below the point of injection has been employed with very satisfactory results. Dr. Angus McLean has amputated at the thigh under its influence and Dr. J. J. Mulheron has made a painless trachelorrhaphy and posterior colporrhaphy through its employment. The patient is placed in the sitting posture on the edge of a table and made to bend forward. By this means the intervertebral space between the fourth and fifth lumbar vertebrae is increased. The surface is carefully sterilized and anaesthetized by chloride of ethyl spray. A specially made, long hollow needle is then inserted through the space. The spinal fluid escapes through the needle as the membrane is punctured. The syringe containing 15 minims of a 2 per cent sterilized solution of cocaine is then slowly injected. Anaesthesia supervenes in from fifteen to twenty minutes. It is very important that the cocaine solution be carefully sterilized and as the boiling of a solution of the salt destroys its anaesthetic property the solution must be made of cocaine sterilized by dry heat, in sterilized water. The distressing head symptoms which are prone to follow the injection are said to be preventable by means of an elastic ligature thrown around the neck, sufficiently tight to induce a slight cyanosis.—*Therapy.*

The Skin as an Absorbing Medium.

Dr. Thomas F. Reilly reviews the development of our knowledge in this line and its utilization for applying remedial agents externally. This method was much in vogue early in the century, was rejected later on, and recently seems to be reviving again. It has been shown of late that many substances, when applied to the skin, are first converted into a gaseous state and then absorbed. The free passage of oxygen and carbon dioxide through the skin, though well known, has only lately been utilized for practical purposes. Again, many substances which are not absorbed if applied to the skin, find ready absorption is first dissolved in a volatile medium, like ether, chloroform or alcohol.

Passing over to special data, the author says that fats and medicines dissolved in fatty vehicles are to a degree absorbed through the skin, especially if applied with vigorous friction. Petrolatum, on the contrary, is useless for practical purposes in this respect, being unabsorbable.

Wool-fat, if applied with friction, is the best base we have, particularly if mixed with castor oil.

Of medicines, mercury is probably the oldest one employed externally, and our inunction treatment proves its efficiency.

Iodine, as tincture or in the form of an iodide, is also certainly absorbed and appears in the urine. Eucalypti and iodoform, salicylic acid, methyl salicylate, and oil of gaultheria are all absorbed if applied to the skin * * * Quinin and phenacetin may also be applied in the form of ointment. Creosote and guaiacol have been often used locally to reduce high temperatures. Lately, ichthyol has been employed externally for its constitutional effects in measles and smallpox, and is said to reduce the temperature rapidly. Pilocarpin externally produces profuse sweating; digitalis leaves, in the form of poultice, have a diuretic action; belladonna ointment has caused poisoning. Cod-liver oil may be given by inunction in scrofulous conditions with good effects.

The dosage for external application is two to four times the dose by mouth. Many remedies which are not tolerated by the mouth may be given by inunction. To favor their absorption, the skin should be well cleansed and the remedy applied with friction.—Merck's Archives.

Flies as Carriers of Disease.

For forty years the writer has been struck by the fact that all animals hate flies with an intensity not explained by their suctorial or "biting" powers. Our domestic animals, even our draught animals, expend as much energy in keeping off the pests as they do in our service, or in getting food. Even the most pachydermatous are no exceptions to the

rule. If we observe an elephant, we are astonished at his constant watchfulness and exertions in keeping off the common flies whose suctional powers are so feeble as to be utterly out of proportion to the energy spent. Might not bacteriology have got a hint here of service in discovering the etiology of disease? Did not nature long ago thus find that flies might be the carriers of disease germs? Science is now advancing rapidly toward the same discovery.

The entomologist of the United States Agricultural Department, Dr. Howard, after long studies, believes that flies are often the active agents in spreading typhoid fever. The bacillus of Eberth has been found in flies, and if Dr. Howard is right, then the profession must educate the public and nurses, and so order hospital construction and service that flies shall have no access to food.—American Medicine.

Sanitarium and Sanatorium.

At the recent meeting of the Michigan State Medical Society at Battle Creek, the members were entertained by both the Battle Creek Sanitarium and the Phelps Sanatorium. This led to much discussion, facetiously and seriously, as to the derivation and difference in meaning of the two terms—sanitarium and sanatorium. It was suggested that there being two similar institutions in the same town, it was desired to have differentiating names—hence the use of the two terms—and that the remaining vowels would be utilized in naming other like institutions should they be built there—for example, saniterum, sanitirium, saniturius. Another explanation was that the vowels “a” and “o” were used in the respective names to indicate the relative location of each institution from the center of the city. The Sanitarium, being nearer, used the first vowel of the alphabet.

The Standard Dictionary gives “sanatorium” as a corrupt form of “sanitarium.” The Century Dictionary does not recognize the term but gives “sanitory” as an erroneous form of “sanitary.” But, notwithstanding this, the word “sanatorium” has come to stay and is restricting the meaning of “sanitarium.” The English language is a live language and is constantly undergoing changes, new words being added and old words being dropped or modified in meaning. “Sanatorium” is derived from the Latin verb “sano, sanare,” which gives the root “sanitor,” and means “to cure or heal.” Hence, a sanatorium is an institution for the medical or surgical treatment of the sick. Sanitarium is from “sanitas,” health, and, recognizing the two words, is to be employed specifically to designate a health resort for convalescents and for general recuperation—a healthful place of rest. The word is then analogous in meaning to the German “Heilanstalt.”

The government hospital at Fort Stanton for the treatment of consumptive sailors has been given the name "sanitorium" by the U. S. Marine Hospital Service. The title "Sanitorium" has also been adopted by the Massachusetts state institution for the treatment of consumptives. Besides, there are numbers of private institutions using the title "sanitorium." The term must now, perforce, be recognized and given a definite place in our vocabulary.—*Therapy*.

Small Pox.

Smallpox is more generally prevalent in the country than for many years. The total number of cases, according to the official bulletin of the Marine Hospital Service, issued February 21st, is 15,617, as compared with 5,256 last year. The deaths have been 355, as compared with sixty-four for the corresponding period last year. In Montana, South Dakota, Texas, Utah and Virginia the disease has not gained any foothold recently and present conditions are much better than last year at this time. Montana a year ago, for instance, had 218 cases and has but ten now. Utah had 358 cases last year and but five now.

The two states where the disease is doing most work are Wisconsin and Minnesota, in the former state there being 5,094 cases, as compared with 303 last year, and in the latter state 2,696 cases, as compared with 505 last year. In no other state does the number of cases reach a thousand, Pennsylvania with 859 and Kansas with 756 being the nearest that figure. None of the remaining states goes over 500 cases and only two—Ohio and Nebraska—rise to that point.—*Mpls. Journal*.

Minnesota State Board of Medical Examiners.

QUESTIONS FOR THE EXAMINATION OF JANUARY, 1902.

SURGERY.

C. J. Ringnell, M. D., Minneapolis.

1. Describe the operation of tracheotomy.
2. Describe granulations.
3. Give the treatment of benign tumors.
4. Give diagnostic symptoms of aortic stenosis and differentiate
5. Define ileocecal intussusception; volvulus.
6. How would you treat ankylosis?
7. What are the symptoms of stone in the bladder?
8. What are the symptoms and what is the treatment of hemorrhoids?
9. Describe congenital inguinal hernia.
10. Describe the varieties and treatment of fractures of the patella.

PRACTICE.

P. A. Hilbert, M. D., Melrose.

1. Give aetiology, symptoms and treatment of tetanus.
2. Give symptoms and treatment of purulent pleurisy (empyema).
3. Give aetiology and symptoms of pulmonary embolism.
4. Give diagnostic symptoms of aortic stenosis and differentiate from aortic regurgitation.
5. Define leukaemia (leucocythemia) and haemophilia.
6. Give aetiology, symptoms and treatment of chronic hydrocephalus.
7. Give aetiology of epilepsy and classification of same.
8. Give treatment of chorea.
9. Give pathology and treatment of chronic intestinal catarrh.
10. Give treatment of acute rheumatism.

EYE AND EAR.

A. F. Groves, M. D., Brainerd.

1. Eye strain, causes, symptoms, both in the eye and outside of it and treatment.
2. The retina, what is it, color, briefly describe it and give function.
3. Give muscles of the eye, external and internal and from what nerves do they get their nerve supply.
4. How would you treat furunculosis of the external auditory canal?
5. Describe the operation of enucleation of the eye-ball.

CHEMISTRY, URINALYSIS AND TOXICOLOGY.

A. F. Groves, M. D., Brainerd.

1. Chemical test for uric acid.
2. What is the best antidote in a case of poisoning by a tin solution?
3. On what chemical hypothesis are lithium compounds given to gouty patients?
4. What is dialysis, and for what is it used in toxicology?
5. What is the clinical significance of leucin and tyrosin in the urine, and how are they separated and detected?

DISEASES OF WOMEN.

Thos. Lowe, M. D., Slayton.

1. Describe the round ligament; the broad ligament, and Douglas' cul-de-sac.
2. Give general causes and treatment of cystocele.
3. Define subinvolution of the uterus and give causes and treatment for same.
4. How would you differentiate disease of the right uterine appendages from appendicitis?

5. Give fully the early symptoms of cancer of the body of the uterus.

DISEASES OF CHILDREN.

Thos. Lowe, M. D., Slayton.

1. Give symptoms fully of dilatation of stomach.
2. How would you manage and treat an ordinary case of cholera in a girl eight years old?
3. Differentiate fully a case of measles (rubeola) from one of German measles (rotheln).
4. Give management and treatment of a case of eczema capitis in a child one year old.
5. What are the principal complications of scarlet fever, and treatment of each?

MATERIA MEDICA AND THERAPEUTICS.

L. A. Fritsche, M. D., New Ulm.

1. Give the modes of administering drugs.
2. Mention the remedial measures other than drugs.
3. Why is the following prescription incompatible?

R.—Potassii iodidi 10,0
 Acid. nitro-muriatic dil. 10,0
 Tr. cinchonae comp. q. s. ad. 120,0

Sig. Take one teaspoonful in water as directed.

4. Give the physiological action of mercury.
5. Give the physiological action of arsenic.
6. Give the physiological action of opium.
7. Give the therapeutics of iodine and its salts.
8. Give the therapeutics of ammonia.
9. Give the average dose of atropine, morphine, strychnine, digitalin, nitro-glycerine, fluid extract of ergot, phenacetin, chloral hydrate, bromide of potash, and calomel.
10. Describe the stages of chloroform anesthesia.

HISTOLOGY AND PATHOLOGY.

Wm. Davis, M. D.

1. What is fatty degeneration and in what structures of the body does it occur?
2. Anæmia.
3. Acute endocarditis.
4. What is ascites and what are its principal causes?
5. Describe the principal pus-producing micro-organisms.
6. Describe the structure of bone.
7. Describe a lobule of the liver and its relation to the vessels and ducts.
8. What cellular elements may be found in urine?
9. Describe the coats of the stomach.
10. Give the structure of a mucous membrane.

ANATOMY.

Adele S. Hutchison, M. D., Minneapolis.

1. Describe the seventh cervical vertebra.
2. Describe the articulation of the hip joint.
3. Describe the vastus externus muscle, giving origin and insertion.
4. Describe the aorta.
5. Describe the venae cavae.
6. Describe the lymphatic system of the intestines.
7. Describe the pia mater.
8. Describe the heart.
9. Name the branches of the brachial plexus of nerves.
10. Describe the pancreas.

PHYSIOLOGY.

A. G. Stoddard, M. D., Fairfax.

1. What do you understand by the term "reflex action" as applied to the physiology of the nervous system?
2. Describe the mammary gland, and give normal constituents of human milk.
3. Define protoplasm; a cell; a corpuscle.
4. What is lymph, and its mode of reaching the lymphatic vessels and glands, and finally the venous circulation?
5. What are blood leukocytes? Specify some of their most important properties.

MEDICAL JURISPRUDENCE.

A. G. Stoddard, M. D., Fairfax.

1. Upon what post-mortem appearances of a dead body found under water would you base an opinion that death was due to drowning?
2. What condition of the respiratory organs in the body of a newborn child would convince you that the child was still-born?
3. Knowing the physiological effects of strychnia, what post-mortem lesions would you look for in a case of supposed death from strychnia poison, and where would they probably be most marked?
4. What are ptomaines; may they not be mistaken for vegetable alkaloids in post-mortem analysis of viscera?
5. State, broadly, what must be proven to sustain a civil action for malpractice against a physician or surgeon in general practice.

Report Examining Board of Virginia for Fifteen Years.

We are indebted to Dr. A. P. Williamson for the following report showing the proportion or percentage of failures of applicants for a medical license in Virginia covering a period of fifteen years, compiled from old school sources. Homœopathy has nothing to be ashamed of.

NAME OF COLLEGE.		No. Applicants	No. Rejected.	Per Cent Rejected.
Va.	Col. of Va.	295	43	
Va.	U. of Med.	206	13	
	U. of Va.	220	10	
Md.	Baltimore, Medical.	41	22	
	Balto., U.	11	11	
	Call P. & S.	136	34	
	U. of Md.	161	34	
D. C.	Nat. Med.	1	1	
	Howard U.	22	20	
	Georgetown	6	2	
	Columbian, U.	1	0	
N C.	Leonard, Med.	83	18	
	Med. C.			33 per cent.
Ga.	Atlanta.			70
Ky.	Louisville.			47
	Sch. of Med.			10
	Hospital Col.			25
N. Y.	U. of New York			38
	Bellevue			5
	P. & S.			6
	L. I., Hospital Col.			50
	Penn. Med. Chi.			100
	Jeff.	42	13	31
	U. of P.	23	3	13
Ohio.	Miami			60
	Columbus			33
	Eclectic			100
	Starling			100
Mass.	Harvard			100
Mich.	Detroit			33
	Mich. College M & S.			33
	U. of Michigan			0
HOMŒOPATHIC.				
Mo.	Mo. Homœopathic	8	3	37
Penn.	Hahnemann Philadelphia			22
Ohio.	Cleveland			0
	Pulte			0
Ills.	Hahnemann, Chicago			0
	Chicago Homœopathic			20

MINNEAPOLIS HOMŒOPATHIC MAGAZINE.

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EDITORIAL.

The Recrudescence of Hepar Sulph.

Calcareo Hepar Sulphur is in the ascendancy; the allopathic school has at last awakened to a realization of its virtues and through the energetic pushing of a few of the progressive members of the dominant school, the drug is about to receive a long delayed recognition. Not under the name of Hepar Sulph, however, as that would be too homœopathic, but under its chemical name of calcium sulphide. Years ago Ringer and Duhring recommended calcium sulphide in pustular diseases of the skin, and other therapeutists advocated its use as a depilatory, but beyond this it has had no place in the materia medica of the allopaths. We know that Ringer's assertions are all biased by a homœopathic education; so too with S. O. L. Potter's and several others who have acquired a reputation in allopathic circles as deep thinkers in therapeutic lines. Now comes the more advanced set of the old school, the alkaloidal therapeutists, headed by Waugh and Abbot, of Chicago, and they have taken up the cudgels in favor of the malodorous calcium salt. Through the mediums of the *Alkaloidal Clinic* and the *Surgical Clinic* they have exposed the good qualities of the drug, until quite a goodly number of allopaths now worship at the shrine of calcium sulphide who were wont to scoff at

Hepar Sulph. Merck & Co. have also promulgated the doctrine, and my old friend, Dr. S. E. Earp, of Indianapolis, has come out talipes-plantaric as an exponent of the good that can be accomplished by calcium sulphide. Here's looking at you, Samuel, and hoping you may acquire as much glory as did John Aulde when he filched arsenite of copper from the homœopathic and transplanted it to the allopathic school. We homœos are not stingy or exclusive; if you find any other remedies in our materia medica that you think will be of benefit to your patients, help yourselves. Remember, however, that if you expect to secure the same good results that the homœos have, you must use the remedies upon the same indication that the homœos have.—P.

Dr. Ch. Gatchell has now in press a new work on "Diseases of the Lungs; their Pathology, Symptomatology, Diagnosis, and Treatment." The book will be issued in a few weeks.

A Provisional Quarantine.

The laws of most states require physicians (and others) to report all contagious diseases to the health authorities within twenty-four hours after having made a diagnosis. This is an essential preliminary to the placing of warning quarantine signs upon the infected premises. The Minnesota law prescribes what shall be written or printed upon these signs, and prominent among these is the name of the disease. This necessitates a diagnosis before a quarantine can be legally maintained and yet every physician knows that there are many cases in which, during the first few days, the disease is not sufficiently manifest to definitely diagnose. There is almost a certainty that the disease is contagious, but whether it be measles or scarlet fever, chicken pox or smallpox, diphtheria or simple tonsilitis, is often a mooted point until the disease is well advanced. Until a decided diagnosis is made, friends, neighbors and the public generally consider it their privilege to visit the sick one, offer suggestions as to treatment, send in "invalid's delicacies" and tell how "their doctor" would treat the case. All of which increases the opportunities for spreading the disease.

To obviate much of this, I would suggest that state boards of health authorize the establishment and maintenance of a provisional quarantine, to be maintained for a period not exceeding seven days and to be followed by quarantine for a definite disease or all quarantine to be abolished as soon as a definite diagnosis is reached. Such a quarantine could be maintained by posting a notice as follows:

These premises are under Provisional

QUARANTINE.

"All persons are forbidden to go into or out of these premises, or to carry into or out of them any material whereby any disease may be conveyed, except by permission of the Board of Health, under penalty of not less than five dollars (\$5.00) nor more than twenty-five dollars (\$25.00) for any violation of this act." Section 19, Chapter 132, Laws of 1883.

.....
Health Officer.

.....
Clerk.

Dated *190*

I believe the institution of such a regulation would be of benefit to physicians, patients and the public.—P.

The Minnesota Institute of Homœopathy is billed for its thirty-eighth annual meeting next month. Take a hammer and a tack and fasten this important fact upon your Isle of Reil. It behooves every individual member of the society to do his level best to make this meeting a success. I say his, because heretofore the feminine member has more than done her part. Surely during the past twelve months there has come to your notice something of interest to your brother practitioners,—make a note of it, amplify the note and evolve a paper,—need not write a book, or even a "brochure,"—just a short, snappy, juicy paper,—or any other old kind of paper that will be of interest to the society. Don't send your paper to the secretary for some one else to read for you, unless such a procedure is absolutely necessary. The best paper loses much of its interest when read by an innocent party,—yes, this is true, even when I read them,—so come and squeeze the juice out of your papers yourself.—P.

A very timely "Treatise on Small-pox" to sell at \$3.00 is announced for publication early in April by J. B. Lippincott Company. It is written by Dr. George Henry Fox, professor of dermatology in the College of Physicians & Surgeons, New York City, with the collaboration of Drs. S. Dana Hubbard, Sigmund Pollitzer, and John H. Huddleston, all of whom are officials of the Health Department of New York City and have had unusual opportunities for the study and treatment of this disease during the present epidemic.

The work is to be in atlas form, similar to Fox's Photographic Atlas of Skin Diseases, published by the same house. A strong feature of the work will be its illustrations, reproduced from recent photographs, the major portion of which will be so colored as to give a very faithful representation of typical cases of variola in the successive stages of the disease, also unusual phases of variola, vaccinia, varicella, and diseases with which small-pox is liable to be confounded. These illustrations number thirty-seven and will be grouped into ten colored plates, $9\frac{1}{2} \times 10\frac{1}{4}$ inches, and six black and white photographic plates.

The names of Dr. Fox and his associates assure the excellence of the work, in which will be described the symptoms, course of the disease, characteristic points of diagnosis, and most approved methods of treatment.

Minnesota State Society.

The thirty-sixth annual meeting of this organization will occur in Minneapolis, May 21, 22 and 23, next, and its officers expect to make this as successful as any. The various bureau chairmen are as follows, and they are each vigorously assailing the prospective essayist with threats and cajoleries to make their respective bureau the most entertaining of them all:

- "Electro-Therapeutics," Bessie P. Haines, Minneapolis.
- "Skin and Venereal Diseases," P. A. Higbee, Minneapolis.
- "Medical Jurisprudence," Mr. Bannon, St. Paul.
- "Anatomy, Pathology and Histology," A. E. Comstock, St. Paul.
- "Clinical Medicine," O. H. Hall, St. Paul.
- "Obstetrics," B. H. Ogden, St. Paul.
- "Materia Medica," G. E. Clark, Stillwater.
- "Sanitary Science," Henry Hutchinson, St. Paul.
- "Science of Homœopathy," Thos. Lowe, Slayton, Minnesota.
- "Surgery," W. S. Briggs, St. Paul, Minnesota.
- "Gynæcology," Cora Smith Eaton, Minneapolis, Minnesota.
- "Mental and Nervous Diseases," Henry M. Pollock, Fergus Falls.
- "Diseases of Children," L. E. Penney, St. Paul, Minn.
- "Eye, Ear, Nose and Throat," E. L. Mann, St. Paul, Minn.

If your name is not on the list and you have not already selected the subject for a paper, please communicate your preference to the proper chairman and secretary and proceed to get your subject well in hand.

Do not wait to be urged, surprise the chairman, also the secretary, by offering to write upon your favorite subject. Do not forget it. Do it at once and, furthermore, be in attendance at the opening address. Go early and stay late. Homœopathy needs your help.

NEWS AND NOTES.

The Minnesota State Homœopathic Institute meets in Minneapolis, May 21, 22 and 23, 1902. H. M. Lufkin M.D., St. Paul, president; Henry C. Aldrich, M.D., Minneapolis, sec'y.

The Minneapolis Homœopathic Medical Society meets on the second Wednesday eve of each month; Henry C. Aldrich, M.D., President; Adele S. Hutchison, M.D., Vice-President; O. K. Richardson, M.D., Secretary.

The State Medical Examining Board holds its examinations at the State Capital building in St. Paul, the first Tuesday in January, April, June and October, C. J. Ringnell, M.D., Minneapolis, secretary. The homœopathic members are Adele S. Hutchison, M.D., Minneapolis; Thos Lowe, M.D., Slayton and A. B. Cole, M.D., Fergus Falls.

Two new wings are being added to the Gowanda, N. Y., State Hospital.

Dr. W. D. Gentry, he of the Concordance Repertory, has been holding revival meetings in Philadelphia.

Dr. C. H. Ward, of Milwaukee, has retired from practice and moved to Rock Island, Ill., where he will engage in mercantile pursuits.

Dr. W. R. Kennedy has removed from Neillsville to Milwaukee, Wis.

The Wisconsin society meets in Milwaukee in May. Dr. W. W. Irving is secretary.

Dr. Josie B. Connett, of Skaguay, is the only woman M. D. in Alaska, and has a successful homeopathic hospital as well as practice.

Dr. C. E. Kahlke of Hahnemann Colleges has been elected president of the homœopathic staff of Cook County Hospital.

Dr. Alonzo Boothby of Boston, died not long since.

Dr. Petrus Nelson of St. Paul, is feeling very proud over the recent advent of a seven pound young lady at his home.

Dr. Philip A. Forsbeak, Milwaukee, is secretary of the Wisconsin Board of Medical Examiners.

A Philadelphia jury rendered a verdict giving one thousand dollars to parents for the death of a child which developed impetigo and laryngeal diphtheria subsequent to vaccination.

Dr. J. D. Foulon of East St. Louis, formerly editor of the Clinical Reporter died not long since.

Dr. Chas. Adams has resigned the chair of Surgery in the Chicago Homœopathic Medical College.

Dr. A. H. Arp, Moline, Illinois, is surgeon to the City Hospital, to one of the largest manufacturing plants and to the C. B. & Q. R. R.

WANTED—By a woman physician (homœopathic) a position as assistant to a busy homœopathic physician or assistant in institution work. Have had three years hospital experience Work principal object. Address, MAGAZINE PUBLISHING Co., Medical Block Minneapolis.

The Annual Reunion and Banquet of the Alumni Association of the Hahnemann Medical College, Philadelphia, will be held on Thursday, May 15th 1902.

The Trustees and Faculty of the College extend a cordial invitation to all the members of the Alumni and their friends to attend the Fifty-fourth Annual Commencement, to be held on the same evening, at 8 o'clock, at the Academy of Music, S. W. corner Broad and Locust Streets Philadelphia.

W. D. CARTER, M. D., '94, Secretary,
1533 South Fifteenth Street, Philadelphia.

ALONZO P. WILLIAMSON, M. D. '76 President,
Minneapolis, Minnesota.

DID IT EVER OCCUR TO YOU

That gratitude decreases in inverse ratio with the lapse of time following the beneficent act?

That the longer you allow an account to stand the harder it is to collect?

That a favor is soon forgotten but than an injury is brooded over, making the resentment stronger with the years?

That short accounts make long friends?

That you gain only your patient's contempt for your business methods, when you allow him indefinite time for the payment of his bill?

That medicine is a business as well as a science and that the physician who is most business like in his methods is most esteemed?

That it is a mistake to make your patients your boon social companions?

That the social ladder is not the one to mount if you seek to pluck the persimmon of professional success?

That it is better to make six two-dollar visits a day than a dozen dollar visits?

That the average man appreciates most what costs him most?

Plaster of paris bandages may be removed by the following simple method: Soak some cotton-wood in hydrogen dioxid; then with this moisten the splint down its entire length for a width of about half an inch. When thoroughly soaked, the plaster will be found in the same condition as when first put on, and the bandages only have to be cut with a pair of scissors, without any injury to the patient or any trouble whatever.

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Renal Calculus.

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CHICAGO, ILL.

The study of renal calculus is of prime importance to all those practitioners who dwell in the limestone districts of the West, both because the disease is relatively common here and because diagnosis of it in spite of all our vaunted up-to-date knowledge is not always easy. Patients have come to the writer from expert diagnosticians, who have been uncertain in regard to the diagnosis, and in one instance no sign of the presence of stone was sufficiently evident to warrant a diagnosis, until the patient actually passed a calculus when urinating into a glass handed him by the writer.

The inference to be drawn is that renal calculus may be present for some little time before it is suspected. The X-Ray examination is now of aid in the diagnosis and should be made use of whenever possible.

It is my purpose, in this paper, to consider typical and atypical cases of renal calculus and to attempt to describe the means by which it may be differentiated from numerous other maladies, together with a few notes on preventive treatment.

TYPICAL CASES

Typical cases of renal calculus may usually be recognized without much difficulty by paying attention to the history and clinical features of the case. The patient is either a child or more commonly a middle-aged male adult, with previous history either of good general health or of the uric acid diathesis, who lives or has lived in a limestone district, especially where the hard water of artesian wells is used. His habits are usually, though not invariably, sedentary or luxurious, and

he is likely to be a hearty meat eater, or a beer or wine drinker. In most cases he begins his illness by feeling a dull pain in the loin, which is aggravated by riding, especially over a rough road. Sometimes there is marked sensitiveness to pressure over the region of the affected kidney and the patient flinches from the touch of the physician's thumb or finger. In some cases there is no sensitiveness over either kidney, even on deep pressure. In one such case seen by the writer the patient insisted that the pain was affected by the weather, being worse in damp weather.

Sooner or later renal colic takes place, quite often after violent sudden exertion, jolt, or fall. In one case observed by the writer it came on when the patient tried to lift a trunk. Sometimes, however, renal colic appears after but slight exertion, and occasionally it may occur even when the patient is quiet in bed.

Renal colic begins suddenly, the pain is cutting, stabbing, sharply defined, follows the course of the ureter towards the genitals, or into the thigh. The testicle on the affected side is frequently retracted; there may be chills or chilliness, elevation of temperature, faintness, nausea and vomiting. The pains may be in some cases more severe in the back or radiate upward into the epigastrium. After an hour or so the severe pain may cease as suddenly as it came on, after which there is more or less prostration, and an aching pain in the region of the affected kidney, persisting for a considerable time.

Whether the patient has renal colic or not, the condition of the urine is important. Persistent presence of blood corpuscles, or of blood, visible to the naked eye, is a common feature, while at the same time the symptoms and history of other maladies, as renal congestion, genito-urinary tuberculosis, bladder, prostatic or urethral lesions, by which the presence of blood can be accounted for, are absent. Blood in the urine, more abundant after exercise, together with pain in the loin, should always arouse the suspicion that calculus is present in the kidney. Especially is this suspicion warranted, if the hemorrhage does not occur immediately after the exercise or exertion in question, but follows after some hours, or even on the next day; for example, a man rides around his farm on Monday, and on Tuesday has a urinary hemorrhage.

Next of importance, though not of frequent occurrence, is the presence of sharp, spiny, reddish crystals of uric acid in the urine, easily seen by the microscope with a low power, say 150 diameters. These signify hyper-acid urine and deposit of crystals in the uriniferous tubules, and also in the calices and pelvis.

Sharp pointed crystals of uric acid without blood may be found in the urine in cases of rheumatism; sometimes together with blood in renal

tumors. As a rule, however, blood and sharp uric acid crystals signify calculous pyelitis. Quite commonly any crystals of uric acid may have sharply defined edges, but unless they taper to a sharp point they are not to be regarded as significant. Crystals of urate of ammonium in stale or decomposed urine have small spiny projections, but the latter can be seen plainly only with a high power, say 500 diameters. When the ureters can be catheterized, excess of any crystals found in the urine of one side over that from the other, is an important aid in diagnosis.

In cases of renal calculus, when blood is found in the urine, it is almost always more abundant in the day urine than in the night, whereas in tumor or in tuberculosis, hemorrhages at night are not unusual.

Next in importance is the occurrence of pus in the urine, with or without blood or crystals. In cases in which there is much sensitiveness to pressure over the affected kidney, together with pus in acid urine, it should arouse the suspicion that calculus is present, even if blood and crystals can not be found in one or two examinations. If the urine is watched carefully and examined repeatedly, blood corpuscles will in all probability eventually be found by the microscope, if renal calculus is present.

Again, it seldom happens in cases of renal calculus that tube-casts are absent from the urine. They are usually of the hyaline variety, with renal epithelium scattered about in them, the latter being stained yellow by the coloring matter of the blood; sometimes we find, also, yellow granular casts. As a rule casts, when present, are not abundant, five or ten in all in the sediment of half a fluid ounce of urine. When much pus is present in the field, tube-casts may escape notice.

Lastly, it is not unusual to find a low ratio of urea to uric acid; less than 40 parts of urea to one of uric acid, when the patient has not yet been put on a diet.

The diagnosis may be confirmed by the X-Ray, especially in thin patients and where the calculus is large, but a small stone in a fat person may not be detected by this means.

ATYPICAL CASES.

Cases occur in which the stone is too large to pass through the ureter into the bladder, so that a typical renal colic, beginning suddenly and ending suddenly, is not observed. In such cases there are recurrent attacks of backache, chill, fever and high colored urine. If the calculus be dislodged from the infundibula or from fixed position in the renal pelvis, then there may be observed the usual symptoms of renal colic, viz.: severe paroxysmal pain, nausea, vomiting, faintness, etc., lasting until, for any reason, the stone slips back out of contact with the ureter into the pelvis of the kidney again, which it may not do for hours. The

pain, in such cases, recurs from time to time, according to circumstances. If the calculus becomes impacted in the ureter, the pain sets in suddenly and is only gradually relieved, the paroxysms recurring until the ureter becomes habituated to the presence of the stone. Cases occur in which the stone becomes impacted in the ureter, close to the vesical orifice, in which case the site of the pain, after having for some time shifted in a direction generally downward, suddenly becomes fixed and the quantity of urine may be diminished materially, owing to suppression on the affected side.

Cases also occur like the one mentioned at the beginning of the article, in which backache and obscure nervous symptoms are the only clinical features, the urine being normal in all respects. The first marked symptom in this class of cases may be renal colic.

On the other hand, renal colic may be experienced and stone be absent altogether, the pain being due to the passage of tuberculous material, or hydatid sacs, or simulated by kinking of the ureter or spasm of the ureter.

DIFFERENTIAL DIAGNOSIS.

The differential diagnosis of renal calculus from other maladies is of the utmost importance, because of the bearing on treatment. Cases frequently occur, to the mortification of all concerned, in which operation for calculus fails to find any stone at all.

The diseases which may simulate renal calculus are as follows:

1. Most commonly, renal tuberculosis (primary).
2. Movable kidney with kinking of the ureter (Dietl's crisis).
3. Chronic interstitial nephritis with adhesions.
4. Inflammation and dilatation of the renal pelvis from causes other than stone.
5. Reflex spasm of the ureters or of the right ureter alone.
6. Nephritis with backache.
7. Paranephric abscess.
8. Various colics; appendicular, hepatic, gastric, intestinal and that of lead poisoning.
9. Malaria.
10. Stone in the bladder.
11. Dysmenorrhea.
12. Spinal caries.
13. Locomotor-ataxia.
14. Renal hydatids.

In primary renal tuberculosis we find the patient under forty years of age; commonly a puny, pale, lightweight, anemic male, between twenty and forty, with cold hands and clubbed finger nails. The finger in the

rectum may discover nodules in the prostate and seminal vesicles. He has increased frequency of urination, both at night and by day, while the patient with renal calculus has frequency chiefly during attacks of renal colic. The tuberculous patient may pass blood freely during the night, while the patient with calculus seldom voids blood at all during the night, or if he does, it is in small quantity, compared with the day.

The tuberculous patient is likely to have more or less pyrexia and symptoms referable to the bladder, which are not characteristic of renal calculus. Discovery of the bacillus of tuberculosis is an aid in diagnosis, as is also the presence of caseous masses in the urine. The patient with renal tuberculosis never feels well, but the patient with renal calculus often feels entirely well between attacks.

Movable kidney with kinking of the ureter may give rise to attacks simulating renal colic. The attacks (Dietl's crises) of abdominal pain are severe, with chills, fever, nausea, vomiting and prostration. The urine during the attack is scanty, contains an abundance of urates and oxalate crystals, and both blood and albumin may be present. During the attack a swelling may be perceived, due to hydronephrosis, which subsequently disappears when the attack is over, and a copious flow of clear urine takes place. If, as is not rarely the case, the movable kidney is nephritic, albumin and casts will be found in the clear urine voided after the attack. Rarely, movable kidney without kinking of the ureter, is accompanied by hematuria, probably from congestion, as suggested by A. T. Cabot.

In movable kidney the patient is usually a thin person, especially a thin woman, who has borne children in rapid succession and who has a history of a complexus of symptoms, mental, neurasthenic, gastro-intestinal, hepatic, uterine and ovarian. After the crisis of pain is over, it is often not difficult to perceive, by palpation, a movable tumor in the loin, manipulation of which may cause peculiar sinking, fainting sensations. Cases may now and then occur in stout persons, and the differential diagnosis from stone dislodged, but not passed, is then difficult. In such cases persistent examination of the urine must be made for the more or less continuous presence of blood corpuscles and casts of the hyaline or yellow granular form, as significant rather of calculus than of nephroptosis. But if in a stout person, a movable kidney happens to be also nephritic, it may be impossible to differentiate definitely without long observation of the case, unless the urinary features of renal calculus above described become marked. In cases where, between attacks of pain the urine is normal, the chances are in favor of movable kidney rather than calculus.

In chronic interstitial nephritis, with density of structure of the

kidney, it sometimes happens that there are adhesions to the surrounding parts and retractions under the ribs, evoking attacks of fixed renal pain, accompanied by frequency and difficulty of micturition. In such cases we have the cardio-vascular symptoms of contracting kidney, the absence of blood and crystals from the urine, except in hemorrhagic cases, and the characteristic urine of contracted kidney, namely, of low specific gravity, poor in solids and especially in uric acid. In these cases it is said that nephropexy relieves the attacks of pain.

An inflamed and dilated renal pelvis, without presence of stone, may cause attacks of pain simulating renal colic. Cases have occurred in which operations for stone have been performed, and although no stone was found, recovery has taken place afterwards. In stout patients differentiation from calculus is difficult, but in thin persons the X-Ray is of value in the diagnosis. The history of the case becomes important in making the diagnosis; anything which points to the passage of an irritant, bacterial or toxic, through the kidneys, or especially infection from operations on the lower urinary tract, being in favor of non-calculous pyelitis. The general condition of the patient in most cases of renal calculus is good, and the history often that of freedom from previous illness.

Spasm of the ureter, occurring in women, may be mistaken for renal colic. This is usually a sequence of urethritis. The patients describe the spasms as occurring most often during the night; they awake with a pressing desire to urinate; the emptying of the bladder is accompanied by more or less pain and spasm, and followed by a cramp-like pain, ascending along the course of the ureter to the kidney, and also radiating to the lower extremity. The diagnosis of urethral lesion is of aid in differentiating this spasm from renal colic; or else the history of some previous disease in the lower urinary tract, shows the reflex nature of the spasm. Absence of stone shown by the X-Ray in thin persons, or of blood, pus, or excess of crystals, shown by ureteral catheterization, will help to exclude renal calculus.

In either sex, spasm of the right ureter alone may occur and be reflex and sympathetic, due to disease in the gall-bladder, appendix, or colon. Examination of the urine, however, shows no evidences of renal calculus in such cases, and the latter may be excluded, as above, by the X-Ray or ureteral catheterization.

The backache occurring in nephritis is usually readily recognized as such by the presence of a comparatively large amount of albumin in the urine, and of numerous and various casts. If in addition, pallor, weakness, dyspnea and edema are found, the diagnosis of nephritis becomes more certain.

In paranephric abscess the pain may be severe, and the renal congestion such that blood corpuscles are found in the scanty high-colored urine. The course of the disease is such, however, as to enable us usually to differentiate without difficulty. The history is also of service, as this disorder is the result of extension of an inflammatory process from elsewhere, as from appendicitis, pelvic cellulitis, and various suppurative lesions. It also occurs from a wound or surgical operation, and as a sequence of infectious diseases.

In paranephric abscess we eventually find a painful tumor in the region of the kidneys, with chills, fever, etc. In renal calculus we have usually a history of good previous health, or at least of an absence of suppurative or infectious disease, and tumor is absent except in cases where impaction leads to hydronephrosis or pyonephrosis, neither of them so sensitive to pressure nor so extremely painful as the paranephric abscess.

Appendicitis is a disease which, when not typical, must be differentiated from renal calculus. Ordinarily, renal colic is distinguished by the absence of tumor, fever and spot of tenderness, but atypical cases of appendicitis may be mistaken for renal colic, especially when there is no tumor, no marked temperature, and when the pain is in the right hypochondriac region. If there is localized extreme tenderness in the right lower abdomen, appendicitis is the cause, but when the point of greatest pain is in the right hypochondriac region, care must be observed to determine whether or not it is "the spot of tenderness" of appendicitis in an unusual location, or whether it is simply the locality where the pain is the worst. The general tendency in appendicitis for the pain to settle rapidly into the appendicular region is a help in differentiating. Moreover, the character of the pain in the two diseases is likely to be different. In renal colic it is the writer's experience to find in the intervals between the severest attacks a tendency on part of the patient to brace his feet, if he can, against something; whereas, in appendicitis the general tendency is to draw up the leg on the affected side.

It must not be forgotten that the urine in appendicitis is scanty, and that micturition may be frequent, as in renal colic. Moreover, retention of urine later in the case is noticed in appendicitis, which may be mistaken for the suppression of urine, which is sometimes noticed in renal calculus. If we find in the urine blood corpuscles, casts and crystals, especially sharp uric acid crystals, while at the same time it can be decided that a spot of extreme tenderness is absent, even though we can find the locality of greatest pain, the chances favor renal calculus, especially in the absence of tumor and temperature, and especially if the pain does not settle into the appendiceal region. Leucocytosis being

absent is also in favor of renal calculus. It must not be forgotten, however, that a patient with slight calculous pyelitis may be seized with acute atypical appendicitis, in which case the determination of a spot of real tenderness and the presence of leucocytosis are of importance. Some clinicians dwell on the fact that in renal calculus the pain may radiate into the groin and testicle, but this may also be true of the pain of appendicitis, at least after it has settled into the appendicular region.

Hepatic colic may be mistaken for renal colic before the occurrence of jaundice, and when there is no bile in the urine. Cases are commoner in women than in men. The pain of gall-stone colic is usually preceded by a feeling of intense fullness in the region of the liver, coming on several hours after meals. The pain is located over the liver, over the gall-bladder, toward the umbilicus, toward the right shoulder, sometimes toward the epigastrium. Tenderness on pressure is present, and remains after the pain ceases. Jaundice, together with biliary matter in the stools and urine, favors the diagnosis of hepatic colic. An inflamed and distended gall-bladder presents pain, tenderness, tumor and fever. The tumor is pear-shaped, movable, and is rather above than below the level of the navel, and is more likely to be confounded with renal tumors than with renal calculus.

The tendency of renal colic to make the testicle tender and retracted is of service in differentiating renal calculus from both hepatic and intestinal colic, as is also the condition of the urine.

Intestinal colic is not so sharply defined as renal colic, and lacks the retraction of the testicles and the urinary features of renal calculus. Both intestinal and gastric colic tend to improve rapidly.

The colic of lead poisoning may be inferred from the history, the presence of a blue line around the gums, paralysis of the extensors, and obstinate constipation. The urinary features are either lacking or those of contracted kidney.

Singularly enough, renal calculus has been mistaken for malaria. In some cases, when the stone is too large to be voided by the ureter, recurrent attacks of non-suppurative pyelitis may occur, and the back-ache, chill, fever and high-colored urine closely simulate malarial attacks. Presence of blood corpuscles, microscopically, and of sharp spiny crystals of uric acid, together with the absence of the plasmodium from the blood, tends to show presence of renal calculus, especially when the climate and the history do not support the diagnosis of malaria.

Stone in the bladder is sometimes mistaken for stone in the kidney. More commonly stone in the kidney is mistaken for stone in the bladder, especially when phosphatic calculus is present. But when the renal stone is phosphatic, in such cases as have occurred in the writer's

experience, the urine contains a large quantity of triple phosphate crystals without the sticky pus, mixed with blood, and micro-organisms that we find in vesical calculus. If, at the same time, the classical symptoms of bladder-stone are absent, namely, frequent and painful urination, together with stoppage of the stream with a twinge of pain shooting along the course of the urethra to the meatus, the presumption is in favor of the presence of renal rather than vesical calculus. Moreover, it will be remembered that the pain and frequency in cases of vesical stone are worse on motion and aggravated, therefore, by walking, not so much by riding in a carriage or other vehicle. The X-Ray should, in many cases, be of service in detecting stone in the bladder, to say nothing of what is found by use of the sound; the history of residual urine, or the prior occurrence of renal colic, will aid us in distinguishing vesical stone. In cases of stone in the bladder, the urine may be very strongly ammoniacal, and the pain on urinating extreme, which is not common in cases of renal calculus.

Dysmenorrhea should not be confounded with renal calculus, if attention is paid to the comparative regularity in the periodicity and to the absence, between attacks, of blood corpuscles from the urine. Moreover, the connection of the pain with the menstrual flow should be evident.

Spinal caries is sometimes distinguished with great difficulty from renal calculus. An abscess in connection with spinal caries may open into the pelvis of the kidney, and pus be found in the urine. Absence of abnormal constituents of the urine prior to the sudden appearance of a considerable quantity of pus will aid in differentiating.

The pain in locomotor-ataxia should be easily differentiated from that of renal calculus by the associated presence of Argyll-Robertson pupil, the loss of knee-jerk and the disturbances of co-ordination. It must not be forgotten that cystitis is frequently observed in locomotor-ataxia, hence the presence of pus and triple phosphate crystals should not lead us to infer that renal calculus is necessarily present.

Renal hydatids may give rise to renal colic from passage of the hydatid sacs through the ureters. In this case there is further trouble in expelling the vesicles through the urethra. Retention of urine takes place, with excessively frequent desire to pass water, and there is severe pain extending to the end of the penis. When once the vesicles are expelled, which may require considerable force, relief follows. The diagnosis of hydatids presents no difficulty when there is a tumor in the loin and when the vesicles are found in the urine. When, however, vesicles are absent from the urine, the tumor may be mistaken for hydronephrosis and in turn it may be assumed that the latter is due to impacted cal-

culus. In such a case, unless the history is of service, as for example that of use of uncooked meat and salads in places where dogs are numerous and live in close association with their masters, the diagnosis is practically impossible.

TREATMENT

In the preventive treatment of renal calculus I hold that all circumstances which favor the deposit of the various urinary salts in the kidneys should be guarded against. The not infrequent habit of drinking beer and eating heartily of meat after exercise and profuse perspiration, is to be condemned, as it is conducive to hyper-acidity of the urine on the following day, which in turn makes likely the deposit of uric acid crystals in the kidneys. Those who live in limestone districts should avoid, if possible, the hard water of artesian wells. It is now possible to purchase a complete apparatus for the distillation of water at a comparatively cheap price. Fifteen dollars will buy a still which will distill enough water for the use of a family of four people at a cost of about fifty cents a month. Those who can afford it should procure this apparatus. The writer has used distilled water as a beverage for several years, and finds it sufficiently palatable. In persons whose urine is habitually strongly acid and prone to deposits of urates or uric acid, regular ingestion of not less than three pints of distilled water daily should be observed, meat should be eaten moderately, sweets, fats, beer and champagne avoided altogether.

Those subject to intestinal indigestion and deposit of oxalate crystals should avoid apples, tomatoes, bananas and rhubarb and take cariod tablets with meals at times when there are digestive difficulties. Hard water should be carefully avoided by them. In cases where the urine is alkaline and cloudy from phosphatic sediments, five grain doses of urotropin may be taken occasionally to give the urine its normal reaction and prevent decomposition of mucus.

As a rule, open air life with ingestion of plenty of soft water and use of a simple dietary, is a good prophylactic against stone. Sedentary or luxurious habits, rich foods and alcoholic drinks seem to be conducive to stone formation.

Without doubt, however, locality has much to do with it. In a report which I received concerning the prevalence of various diseases in the vicinity of Savannah, Georgia, I was struck by the absence of mention of calculous disorders of any kind. It is also of interest to notice the infrequency of calculus among negroes.

When once the diagnosis of renal calculus has been made, the modern idea is to remove it at once by surgical means. The continuous presence of stone in the kidney is held to be a menace to health on account of the possibility of production of serious renal inflammations and degenerations.

Infant Feeding.*

H. M. LUFKIN, M. D.,

Professor Diseases of Children, Medical Department, University of Minnesota.

ST. PAUL, MINNESOTA,

Statistics show that infant mortality is greatest during the first year of life. Of the number that die during the first year, over 60 per cent die during the first six months. There must be some reasonable explanation of this fact, and this will be found in the low vitality of this period of life. The vitality of an infant is in direct ratio to its weight. The heavier the baby, the greater the vitality. Then we may classify children according to birth weight into those of low, medium and high vitality. Seven and one-half and eight pounds represents the medium or normal vitality; above or below that a weak or a very strong child.

Mortality statistics demonstrate then, that the critical period of a baby's life is the first six months of the first year. We know that the initial vitality of the infant influences its prospect of living; that anything interfering with nutrition will go harder with the child of weak vitality than with the one with a more fortunate start in life.

Thus it becomes the duty of its attendants to see to it that the initial vitality of the infant is maintained and increased. So gradual can loss of weight take place that a critical amount may go before the attendant realizes it. Hence the importance of scales.

The scales are the measure of a baby's progressive nutrition. During the first week a child loses and regains the loss consequent upon the establishment of lactation. At the end of the first week it should show the initial weight. After the first ten days, there should be a steady, uninterrupted gain in weight, approximately as follows: A loss of 9 to 11 ounces the first three days; then a steady gain. For the first four months an average of 8 ounces a week or two pounds a month; from the fourth month on to the sixth the gain is less rapid, or four ounces a week, one pound a month. From six to twelve months the average gain will be even less. At seven months the babe has doubled its birth weight. To one who has to do with the feeding of infants then, the gain proper to the first year should be a clear proposition. You should know if a baby weighed seven pounds at birth what its weight should be, approximately, at any period during lactation. The scales will tell you. If a babe's weight is stationary or losing, you know def-

*Read before the Ramsey County Association of Trained Nurses.

initely something is wrong. The younger the babe, the more serious will this be.

Infant Feeding—Breast milk. The natural food for a baby is breast milk. It is impossible, I may say, right here, to cover the subject of infant feeding in the time at my disposal, so I shall endeavor to impress upon you the most essential principles of the subject which should properly come under your management. There is nothing more discouraging in handling a difficult case of malnutrition than the lack of intelligent co-operation on the part of the mother or nurse.

There has been a tradition handed down to recent times that a colicky baby must continue colicky three or six months at least. Colic is a symptom of indigestion—indigestion signifies improper food for the individual case. Improper food calls for a careful revision of diet, and the adjustment of food to a given case that normal health and nutrition shall be maintained, comprises the whole of the subject of infant feeding. If you are to understand the subject you must know the food the baby takes, what it should be and how it may be varied to meet the requirements of the babe.

Mother's milk is the ideal baby food. It has qualities absolutely essential to successful feeding. And all artificial foods aim to imitate it. Its composition is:

Fat, 4 per cent; sugar of milk 7 per cent; proteids, 1 per cent; water, 88 per cent.

You observe that it is not a concentrated mixture; 12 per cent of food and 88 per cent of medium of distribution, common water. It proves that a baby's food should be freely diluted.

Fat, 4 per cent. Too much fat causes indigestion; too little fat causes constipation and malnutrition. The observance of a baby's stool will tell you of the fat it gets. If too much the stool is pasty and light cream color. If too little, the stool is hard and dry. The fat of mothers' milk is normally found in the stool; it is not all used for food. It is nature's laxative for the baby and when rightly used will double discount Fletcher's Castoria. The next element in mother's milk is proteids or casein. This is the substance which forms curds in the stomach. It should cause no disturbance of digestion; yet nine-tenths of the colicky babies are having trouble with casein digestion. The symptoms of indigestion caused by casein are colic, accumulation of gas on the stomach and bowels and the passage of curds in the stool—very likely constipation added to this. The colic of babies is not always due to this. One and five-tenths of casein or curdy substance is the normal amount in mother's milk and it may go as high as six per cent. The sugar (milk sugar) exists in larger quantities than any other ingredient, save water, and is the easiest taken care of by the infant digestion.

There are methods of accurately determining the quality of mother's milk, but these are impractical as yet. The fat is three-fifths of the cream. That is, if you let a graduate full of milk stand over night, three-fifths of the layer of cream on top is fat. If it is five per cent cream it is three per cent fat. You have observed that mother's milk, or breast milk, is not very rich looking. It, on the contrary looks thin and watery; when the cream is removed it should look so. Cow's milk is white, because it contains more calcium phosphates than breast milk. Do not condemn a sample of breast milk because it looks watery when skimmed. By collecting the breast milk in a test-tube or graduate, and allowing the cream to arise, you may, by the eye, fairly well estimate the per cent of cream and fat; at least determine approximately whether it is far out of the normal. Fat may be too abundant; in this case the baby will again suffer from indigestion, though this is not so common a cause of stomach trouble in infants as is the scarcity of fat and the increase of curds or proteids. The symptoms of this condition are colic, vomiting of food and creamy yellow, greasy-looking movements.

A mother's milk is susceptible of change. You all, no doubt, have seen a baby suffer indigestion from some error in diet or fit of grief or anger on the part of the mother. If the breast milk does not agree with the baby it may be because there is some error upon the mother's part. You should know the most common errors, their effects on the milk, and how these effects are corrected by proper management.

The first essential to a secretion of normal milk is that the mother shall have a peaceful, contented, worry-free nursing period. Fear that she will not be able to nurse her baby will arrest the function of lactation.

You are perfectly justified in using artifice to dispel such a belief. Insist upon it that the milk will be abundant and of good quality. Encourage the mother. During the first month, if the baby is fretful let the mother not lose sleep over it. Secure rest and sleep and a mind at peace for the mother, and you have done much for the comfort and health of the baby.

Next. What of the diet of the mother? By diet and exercise the relative percentages of cream or fat and proteids may be regulated. How? First, liquids. Increase the quantity of the milk. The milk may be scanty and too concentrated; hence difficulty of digestion. The giving of a largely liquid diet will correct this fault.

Second, malt extract and beer. These increase the quantity and likewise the quality. They have a special tendency to increase the cream; though they do increase the proteids or curds also, it is not to so great an extent.

Third, an excessive meat diet increases both the cream and the proteids in mother's milk.

Exercise diminishes the proteids and increases the cream. A combination of the increased meat diet and daily exercise in the open air will often make a milk previously indigestible, quite suitable to a baby.

Fourth, a diet of vegetables decreases both the fats and proteids, producing a milk of poor quality.

With these facts well in mind, you have a ready method of regulating the quality and quantity of breast milk, which is of great practical utility.

Let me repeat these, for it is essential that you should know and use them for the good of your patient, before the stomach of the infant has become so upset by indigestion that a more radical change is necessary.

First—Liquid diet increases flow of milk; i. e., the quantity, rendering it more diluted.

Second—A meat diet increases both the fats and the proteids.

Third—A vegetable diet decreases the fats and the proteids.

Fourth—The malt beverages increase the quantity of milk and increase the fat or cream.

Fifth—Exercise decreases the proteids of the milk.

Sixth—Exercise out of doors, always within the point of fatigue, combined with an increase of the proteids or meat diet, reduces the proteids and increases the cream in the breast milk.

Thus you have at hand the remedy for a colicky baby, where you are able to find approximately, even, the fault in the mother's milk, and these faults occur mostly in the early months of the baby's existence, just when you will have great opportunity and influence.

A diet for the best effect on the milk secretion. The nursing mother should have a generous supply of wholesome food, simple and plain, without frills and tucks. Bread, butter, meat and vegetables, varied enough to avoid the tiresome sameness, so often encountered, and yet free from high seasoning or richness. Avoid all indigestible foods, such as pork, veal, baked beans, cabbage and the coarse-fibered vegetables like turnips or radishes. Fruits may be allowed in season. Coffee and tea not more than once a day and then of a weak variety. Then, in addition, milk or gruel at bed time.

The harm of salads, mince pie, etc., comes more from upsetting the mother's digestion than it does from its direct influence on the milk. I doubt very much if the things the mother eats, which are supposed to give the baby colic, such as sour fruit, pickles, etc., are entitled to the credit they get for such unhappy effects. It is really the mother who must suffer first, and through the mother the babe.

So much for the nursing baby and the regulation of the quantity and quality of the mother's milk.

Please bear in mind that besides diet and hygiene, other things influence the secretion of milk and its quality or quantity. The return of menstruation during the nursing period is one of these and pregnancy not uncommonly interrupts lactation.

But when these fail what is to be done? If, for any reason it becomes necessary to substitute another food for breast milk, the important question is, what food is best? The answer to this question is becoming more positively in favor of cow's milk as the closest to mother's milk. Cow's milk, for chemical purposes, contains the same ingredients as woman's milk. It is universally handy and accessible and under the restrictions imposed upon dairying at the present time, is obtainable in fairly pure and clean condition. There are all sorts of commercial foods for babies, all familiar through advertising if not through use. They all possess one disadvantage; they are a manufactured product and are not a natural food. As milk is an animal food and cannot be preserved, without altering its constituents, it follows that we need not look for a natural manufactured food. Some of them are designed to utilize cow's milk as an addition, the manufactured product consisting of starch and sugar in a more or less digested state.

Proprietary foods: Milk foods, Nestle's food, Anglo-Swiss, Eagle and Borden brands condensed milk.

Malted foods: Leibig's, Mellen's, Horlick's Malted Milk; all contain malted wheat and barley, or partially digested starches, as dextrine, dextrose and maltose.

Farinaceous foods: Imperial Granum, Carnrick's Lacto Preparata and Milk Sugar, Lactated food, 75 per cent starch.

Personally, I find it possible to get along without, better than with these foods and I shall dismiss the patent foods with this advice: Do not use the commercial foods which do not require cow's milk to prepare them for use. There is one exception to the commercial food, and it is not a food, but a means of modifying cow's milk by partially digesting it. I refer to Peptogenic Milk Powder. This is a sweetish white powder, a pure sugar of milk with a quantity of the digestive ferments to accomplish a stated amount of digestion, according to amount of milk. The proportion of milk, cream and water are such as, with the sugar of milk added, bring the formula of the mixture to the approximate percentage of the fat, sugar, proteids and water contents of woman's milk.

The average infant under six months is unable to digest cow's milk. The reason is plain when we compare the woman's milk and cow's milk. There are these differences to be noted:

Fat or cream, 3 per cent, mother's; 4 per cent, cow's.

Proteids, 1.5 per cent, mother's; 3 per cent, cow's.

Sugar, 7 per cent, mother's; 6 per cent, cow's.

If you are to use cow's milk for infants, some knowledge of its composition is essential. The purpose of modifying cow's milk is to render it as similar to mother's milk as possible. I have given you the percentage of fats, sugar and proteids for each. The fats, you see, differ very little; the variation of sugar is likewise unimportant. The great difficulty is with the proteids, or what goes to make up the curds. Breast milk, 1.5 per cent; cow's, 4 per cent. Naturally, if the digestion is not hardy, the cow's milk offers too great a task for the baby's stomach, and this mostly through the curds.

If, then, we can keep the cream or fat and sugar just as they are and reduce the proteids to one per cent, more or less, we will have accomplished the most important change. If you dilute cow's milk you dilute everything in it, cream, sugar and proteids. So, for convenience, only very creamy milk is used, being diluted with sugar water of certain percentages. It is best that you should understand how to modify it accurately so as to produce a food with any desirable percentage of fat, sugar and proteids. To modify cow's milk, as I said, it is necessary to have two solutions, the cream solution or cream and milk of definite richness, and a sugar solution.

Creams may be different in their fat percentages. For common purposes of making food for a baby under six months, when accurate modification is most needed, a 12 per cent cream, i. e., a cream which is 12 per cent fat is best. To make this, use ordinary skimmed cream, two parts, and plain milk, one part. By diluting this with milk, sugar water of definite per cent, almost any combination can be made—and seven per cent sugar water is best. The milk sugar water is made by dissolving 1 ounce of sugar in 16 ounces of water for the 6 per cent; the 7 per cent, one ounce to 14 ounces of water. By combining these mixtures, 12 ounces cream and 6 per cent milk sugar solvent we get two useful formulae, as follows:

By diluting 12 per cent cream five times, with 6 per cent sugar sol. you get, Fat 2, S. 6, P. .6 per cent. Diluting four times with 6 per cent sugar sol. you get F. 2.5, S. 6, P. .8 per cent. These two are suitable for young babies.

The next solution is made with 7 per cent sugar mixture and comes very near to the proportion of mother's milk. You remember mother's milk contains, fat, 3 per cent; sugar, 7 per cent; proteids, 1.50 per cent.

By diluting 12 per cent cream three times with 7 per cent. S. Sol. you get, F. 3, S. 6, P. 1.

By diluting 12 per cent cream two and one-half times with 7 per cent S. Sol. you get F. 3.5, S. 6, P. 1.260.

By diluting 12 per cent cream two times with 7 per cent S. Sol. you get F. 4, S. 6, P. 1.3.

You may not be called upon to dictate or prescribe these formulae yourselves. If you are called upon to follow these methods you should at least understand the why and the wherefore of the process.

In general, the most important indications may be summarized as follows:

If not gaining in weight, without special signs of indigestion, increase the proportions of all ingredients.

If habitually colicky, diminish proteids. For frequent vomiting soon after feeding reduce quantity.

For vomiting or regurgitation of sour masses reduce cream and sometimes proteids.

For constipation increase both fats and proteids.

You may have observed that the fat and proteids are as 3 to 1. That is about the proper proportion. And if these formulae are understood variations are easily made between. The sugar lessened or increased at will. As I said, these formulae will answer for the average infant up to six months of age. Beginning with the weakest, i. e., F. 2, S. 6, P. .6, at birth, and giving the baby the stronger foods, in succession, as it grows. At six months, the Meig's formula is a useful one and is adapted to most babies. It is, in reality, about what the next number in the series I have given you would be and is based upon the same principle.

Cream 1, milk 2, water 3, lime water 1, sugar 1, which equals F. 4 per cent, S. 7 per cent, P. 2 per cent.

This, by the way, is the most useful formula for weaning a baby at six months.

It is seldom that one need go outside these formulae. And then only for individual and peculiar cases. It is comparatively easy to adjust a food to a baby of good vitality; too often the mistake is made and not corrected until the digestive organs of the babe are too weak to stand even the weakest food. When that happens you have a sick baby and a serious problem on your hands. Your part lies in getting the baby properly started. Nor have you done it all when the proper food is found. There is more to infant feeding than the food alone. A suitable food may be made unsuitable by improper handling and injudicious or untimely or too much feeding. To make the rules for feeding more reasonable, you should know something about the baby's stomach and digestion. You know, of course, that up to the twelfth month it is a matter of milk food only, the advice of experienced mothers and neighbors to the contrary notwithstanding. Potatoes and cabbage and pie are not suitable for babies before the eruption of the teeth. Yet it is far

from uncommon to find a baby enjoying the luxury of the family dinner. I admit that many babies live through it; also many die as a consequence of just such indiscretions in diet. Starchy foods are inappropriate, because the saliva and other starch-digesting ferments of the organs of digestion are not present in the young infant. This constitutes the chief objection to the manufactured foods—they all contain more or less raw starch from various cereals.

Here again you will note that many babies thrive on such foods, at least seemingly. Yet it is only babies which live on these foods that suffer from rickets and scurvy. Another fault of these cereal foods is their lack of cream. Condensed milk, as an exclusive diet for babies, is bad. Why? Compare it with mother's milk. Mother's milk is fat 3 per cent, S. 6 per cent, P. 1.5 per cent. Condensed milk is usually diluted twelve times to make a food for a young baby. If it is diluted twelve times this is what results:

F. 0.50, S. 3.9, P. .65, Water 94 per cent. This is easily digested and produces fat babies and is a very useful substitute when digestion is very poor or the stomach weak, because it is largely sugar, which is fat and heat producing. The lack of fat leads to common forms of malnutrition. It is the small percentage of proteids which makes condensed milk so easily digested.

The stomach at birth is a small affair, whose capacity is one ounce. It is used as a reservoir and food passes quickly from it into the intestine, where digestion is completed.

The duration of gastric digestion varies with the age of the child. At one month the stomach is empty in one and one-half hours. From two to eight months the average is two hours. Cow's milk requires a half hour longer for digestion than mother's milk. Of course the time of stomach digestion is lengthened by the size of the meal. Disordered digestion makes the time much longer. With these facts before you the rules for frequency of feeding will be better appreciated.

The capacity of the stomach at birth being one ounce, the quantity of the food to be given should not exceed that amount, two ounces being appropriate for the beginning of the second month. The amount at one feeding is increased so that at the sixth week the amount is increased to 3-4½ ounces; this amount not varying up to the third month. Third to fifth month 4-5½ ounces; fifth to ninth month, 5½-7 ounces; ninth to twelfth months, 7-9 ounces. For the first six weeks the intervals of feeding should be two hours and not more than two feedings at night or ten feedings in twenty-four hours. Then from the sixth week to the third month increase the intervals to two and one-half hours and give one feeding at night or eight feedings in twenty-four hours. From the fifth

to the ninth month three hours—leaving off the night meal and from ninth to twelfth month three and one-half hour intervals or five feedings during the day and none at night.

These rules of course are subject to exception. Those of you of much experience in monthly nursing, have no doubt observed differences in babies requiring variations from any fixed rule. If you look to the best interests of the mother and baby you can more than earn your salary, in the influence you may exert on the habits of the baby. Mothers, strange to say, are profoundly inexperienced and untaught in the matters of rearing infants. The first baby is a perfect mystery; the second will introduce as many problems almost as the first. By the time the third has arrived, what with the experiences of the first two and the advice and teachings of friends and neighbors, the mother begins to feel somewhat easy in her mind, and the growing cares of the household gives her time to leave the baby alone, to eat and sleep. Babies are bundles of habit. You can teach a baby good habits just as easily as you can bad ones. You should get it into good habits from the start.

What are some of the faults of the care of infants during its early life, which are likely to leave their impress upon its nutrition and health? The first of these up to the third month, I mean now the first and most frequent error is over-feeding or too frequent feeding. Remember the time it takes to empty the stomach is one and one-half hours. The stomach of a baby is in need of rest the same as yours or mine.

I remember reading of a "London Foundling Home," where there were always many nursing infants; and you know institutional life is hard on babies. The mortality is great—especially from the disorders of nutrition. An order was given the matron for four-hour feeding for some special cases. The order was misunderstood and the matron applied it to all the babies. No trouble occurring it became the rule to feed the infants every four hours and proceeded throughout the summer when the attending physician was struck by the remarkable decrease in mortality and then found the reason. Especially bad is the habit of sleeping with the baby, allowing it to nurse all night or when it pleases.

Nipples when not in use should be kept in borax solution, or solution of soda or boric acid.

Bottles should be rinsed first in cold water, then with a brush and soap and left in water until ready for next using, when they should be sterilized by boiling for twenty minutes.

The food should not be warmed over for a second feeding. The baby should not nurse more than twenty minutes nor be allowed to sleep with the nipple of the bottle in its mouth. Added to these the rules as to regularity of and frequency of meals, must be observed.

The best means of knowing the progress of nutrition is by the scales. Too often I find the nurse or mother unaware that the baby is losing weight or is not gaining, a positive indication of something wrong. The information may come too late to admit of correcting what might have been a simple fault. Food should not be modified for transient disturbances. I have pointed out how faults in the mother's milk may be easily corrected in the early days of the disturbances.

After your time is up, you should have everything in regular routine order, with the mother well posted and able to go on with the good work you have begun.

The next fault is in over-heating or bundling the baby. Of course they lose heat rapidly; but babies are weakened by too much wrapping, combined with too hot rooms, especially after the second or third month and thus may be the cause of weakened digestion. Next to this comes coddling, handling, petting, exhibiting, jumping and jolting, all going to create over-stimulation from which there is sure to be a reaction in time, resulting in vomiting, loss of appetite and preventing the greatest essential to correct infant-raising—sleep. A baby that sleeps poorly is sure to suffer from indigestion and poor nutrition, and vice versa.

The next, and a very prevalent fault, particularly among people who are not able to afford nurses, the poorer classes, who lack opportunity for training themselves in the essentials of cleanliness, is the care of the utensils for feeding. The bottles should be cylindrical, with wide mouths, admitting of easy cleansing. Better have them graduated, thus assisting materially in measuring the food. Nipples of plain black rubber with holes sufficiently large to allow the milk to drop when the bottle is inverted, but not to run in a stream.

The Use of Mercury Cyanide as a Substitute for Mercury Bichloride in Surgery.

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Ever since the advent of antiseptic surgery there has been a longing for some drug which could be used in sterilizing instruments, which would not corrode them, which could be quickly put in use, which could be used any place and under any conditions, which was inexpensive, which was readily portable and which would not injure the hands of the surgeon or nurse. After experimenting several months with an old time antiseptic I think I have solved the problem of doing away with the objection which long ago led to its being discarded, and my aggressive modesty leads me to say that mercury cyanide meets all of the above

requirements, when prepared, cared for and used as I am about to suggest.

Those of my friends who were mixing up with affairs surgical some twenty years ago, can conjure up visions of instruments ruined by corrosive sublimate solutions; many an old time favorite catlin or bistourie has had the edge so "chewed up" by the mercuric bichloride as to render it *hors de antiseptis* along with the bacteria, much to the grief of its proprietor in whose affections it had won a warm spot through long and faithful service.

So, too, my friends can remember stiff and crackly fingers from carbolic acid solutions, and blackened finger nails and sore knuckles from bichloride baths and scrubblings. Much language, stronger than the antiseptic solutions, has been given vent to because of the inroads these substances made upon instruments, hands and purses. For the past six months such things have been strangers to my surgical armamentarium—even the "cuss words."

Mercury cyanide, alias cyanuret of mercury, bicianide of mercury, Prussian mercury, and chemically compounded thusly, Hg. (C. N.) 2, occurs in colorless, transparent prisms, it has a bitter metallic taste and is freely soluble in water and alcohol. Therapeutically it is classified as an alterative, an antiseptic and a tonic. It has been used in throat troubles and in syphilis. When exposed to light it degenerates and takes on a brownish color.

Mercury cyanide is readily soluble in those menstruums most likely to be used in surgical practice. In cold water it dissolves in the proportion of 1 to 12.8, while it only requires 3 parts of hot water. Of alcohol 15 parts of cold and 6 parts of hot are required. This compares very favorably with the corrosive sublimate which requires 16 parts of cold water, 2 parts of hot water, 3 parts of cold alcohol and 1.2 parts of hot alcohol. As 99.99 per cent of all surgical solutions are made with hot water I believe the solubility of the mercuric cyanide fully sufficient to meet all demands.

Mercury cyanide does not corrode instruments, be they solid silver, nickel plated, or highly polished steel; the keenest edge of the most delicate knife is not affected. Instead of dulling the surface of polished instruments, it really tends to keep them in polish by removing the sulphides, oxides and other ides which form from the action of atmospheric gases. Years ago, when a drug clerk, I used to sell potassium cyanide to jewelers and silversmiths who used the solution to remove the tarnish from their wares,—merely dipping in a weak dilution seemed to suffice. I have found tarnished specula (or speculums) and other instruments to improve wonderfully after a few washings in the mercuric cyanide

solutions. The absolute absence of corrosive action of this drug I have demonstrated by keeping various instruments,—steel, silver and nickel plated, in a jar of 1-1000 solution for weeks at a time. You can demonstrate it to your own satisfaction by a twenty-four hours test.

Mercury cyanide solutions do not stain the finger nails, inflame the skin or cause any stiffness or crackly feeling of the fingers or hands. This has been the experience of myself and those of my friends who have used the solution.

Mercury cyanide does not coagulate the albumen in blood, mucous or purulent discharges as does the mercuric bichloride. In washing wounds, cavities or sinuses the solution remains transparent or translucent, there is none of that grayish, blackish or prune colored coagulum or precipitate, which is seen when the bichloride solutions are used. This freedom from turbidity is advantageous where small instruments are used in the same pan with the cleansing solution, or even when used in a separate pan. Many needles, probes and other small tools have been overlooked in the murky depths of a pan containing a curdled mixture of blood and bichloride solution and have been thrown away with the waste. Aside from the practical points mentioned, the aesthetic appearance is improved and the psychic effect upon bystanders is much better.

Mercury cyanide is an effectual antiseptic. Many experiments by many experimenters have demonstrated that in 1-40,000 solutions, it is effective against the milder bacteria and that in a 1-20,000 it is fully capable of rendering harmless the most rabid disease germs known to bacteriology.

Mercury cyanide will not precipitate or decompose when brought in contact with soap. This is a valuable quality, as it permits its use in sterilizing the hands by scrubbing in a saponaceous antiseptic fluid, something which cannot be done with corrosive sublimate, and not satisfactorily with carbolic solutions unless the latter be so strong that they are injurious to the skin.

Mercury cyanide does not necessitate the use of enamelled or porcelain vessels. Being non-corrosive it can be used in tin vessels, a feature which will commend it to the country physicians, and general practitioners who do not carry with them a complete aseptic outfit, and who practice in many houses where tin wash basins are far commoner than papier machie, granite, stoneware or other acid resisting wares. This little feature in the use of this antiseptic is one not to be overlooked.

Mercury cyanide has a history—a past. For years it has been before the surgical public in the form of a mercuric cyanide gauze, but it never became popular because of the higher price than other antiseptic gauzes, because it lost its antiseptic virtues if exposed to the light for

any length of time and because mercury cyanide was a drug little understood. Because of these things its use has lapsed.

Mercury cyanide has toxic properties. It is well that this fact be known and understood before the surgeon begins its use. When the mercuric bichloride came into general use as an antiseptic thousands of physicians and surgeons were amazed to find that their patients presented symptoms not down in the catalogue of surgical phenomena. A little study and investigation soon learned them that these untoward manifestations were due to absorption of the bichloride, and that in their therapeutic blindness they had led their patients up to the edge of the grave, via the dysenteric route. Now I do not want any reader who may be persuaded through this article to use mercury cyanide to ignorantly poison his patients, so allow me to repeat,—mercury cyanide is poisonous. Not only that, but it is one of the suddenest poisons in chemistry's toxic repertoire; in sufficient doses it will precipitate a funeral in less than thirty seconds. But in the hands of a careful, knowing surgeon there need be no more danger than in the use of other toxic antiseptics.

Mercury cyanide exhibits the following toxic phenomena. In lethal doses there is an immediate suspension of all those forms of molecular motion which constitute life, and unless antidotes be close at hand the most competent physician can do little more than act as a witness to the dissolution of life. In acute toxic doses the immediate symptoms are bloody vomiting, frequent and copious stools and severe pains throughout the entire abdomen. In cases of chronic poisoning, or slow poisoning, such as are most apt to follow the long continued use of the drug the most marked symptoms develop in the throat and mouth; there is a slight cough; the lips, tongue and inner cheeks frequently present ulcerations covered with a greyish membrane and the salivary and tonsillar glands become enlarged. This combination has led more than one physician to diagnose cases of slow mercuric cyanide poisoning as diphtheria. [Read the history of the Mollineaux murder trials in New York.] Along with these throat symptoms there appears an injected conjunctiva; severe headache; fixed eyes; cardiac palpitation; frequent, full and hard pulse; difficulty in swallowing; great thirst with a desire to vomit after drinking; more or less salivation, and more or less tenesmus with small bloody stools. There may be suppression of the urine, and the genitals may take on a dark blue color, leading the unsuspecting to suspect gangrene. The danger signals in the use of this drug,—the red lights for which one must look out, are the ulcerations of the buccal, labial and lingual mucous membrane, the enlargement of the tonsils and salivary glands and the salivation.

Mercury cyanide as used by me in my every day surgical practice is prepared as follows:

R Merc. cyanide.....480 grains.
 Powd. soda boras.....1120 grains.
 M. ft. 320 tablets.

This gives a tablet containing 1.5 grains of the antiseptic and 3.5 grains of the adjuvant; and when dissolved in one pint of water gives a 1-5000 solution, which is amply strong for the sterilization of instruments. For a 1-1000 solution add five tablets to one pint of water or else use the larger size tablet containing 7.5 grains of the mercuric cyanide. In my experimental work I used the simple mixed powder, but now that a definite result has been reached the pharmaceutical feature has been turned over to Mr. Babendrier of the Minneapolis Pharmacy, who has turned out a batch of tablets which are eminently satisfactory. If you want to try mercury cyanide as a surgical antiseptic write to Mr. Babendrier who can supply you. Probably, after a lapse of time, other pharmacists may awaken to the advantages of these tablets and offer them for sale; if so they have my blessing, provided they put them up as becomes well regulated, skillful pharmacists, and dispense them in dark amber bottles, securely corked, to exclude light and moisture, which exclusion is of the utmost importance in their preservation.

SELECTIONS.

New Cure for Tuberculosis, Chronic Nephritis and Carcinoma.

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The Allgemeine Homöopathische Zeitung in its number for January 16th of this year gives an account of a novel method of treating—or shall we say curing?—the above diseases by Dr. Edward Krull, of Güstrow, which is distinguished by originality, and according to its author, by success. The remedy employed is formic acid, which is secreted by female and neuter ants in considerable quantities, and has long been known to cause great irritation and even erysipelas and pustular eruptions on the skin of delicate persons. Ants have long been employed in medicine as a rubefacient, and as an external application for rheumatic and gouty pains, edema, paralysis, chronic ulcers and cutaneous eruptions, and even sterility, in the form of cataplasms of crushed ants, aqueous solutions, and fumigations. Homeopathy employs the tincture of live ants, and numerous provings of this have been made and recorded chiefly by the late Dr. C. Hering in the *N. A. J. of H.* A tolerably complete pathogenesis of Formica will be found in Allen's *Encyclopedia* and in Dr. Clarke's *Dictionary of Materia Medica*.

Dr. Krull's paper is contained in the *Aertzliche Rundschau* for November 2, 1901. What led him to think of formic acid as a remedy was its constant occurrence in the internal organs and soft parts of the body, which led him to suppose that it must be of some use in the human economy. He found it constantly present in the sweat of healthy persons, whereas in that of phthisical patients it was either in very much diminished quantity or was entirely absent. As it has anti-bacterial properties, he thought that it must play the part of a defensive agent in the organism. He thought to supply the defect of the acid in phthisical subjects by introducing it into the system in material quantities. But he found that it did no good when given in considerable doses by the mouth. So he had recourse to hypodermic injections of the watery solution. After two years of experiments he found to his surprise that the more he diluted the acid and the smaller the dose he gave, the better was the result obtained. Hence he concluded that the benefit caused was not owing to supplying from without the deficiency of formic acid in the system, but that his minute injections stimulated the cells to an increased secretion of the acid which became manifested in the increased amount of it in the sweat. He employed at first a solution of 1 of acid to 1,000 water, then 1 to 100,000, and at length one part of acid to several million parts of water. In fact, his dilutions corresponded to our 3d and 4th centesimal potencies. Experience taught him that injections must not be frequently repeated, that it was best to wait five or six months before administering a second injection of this very diluted preparation.

He treated in this way, with success, external and internal tuberculosis, chronic nephritis, and malignant tumors. It was necessary for the success of the treatment that the nutrition of the body should be well maintained. In cachectic states the treatment is absolutely contraindicated. It will be remembered that Hering mentions the case of an anemic woman who died from the effects of an ant-vapor bath.

The general effects which were observed in all the cases treated by Dr. Krull's method were: Immediate increase of nutrition, the appetite improved, the weight increased; all this without any material change in the diet. In all the patients during the first months, sometimes every two or three days, sometimes at an interval of weeks, there occurred slight transient attacks of pain in the abdomen, on the right and left of the umbilicus, sometimes accompanied by urging to stool. If several copious fecal evacuations occurred this had no bad effect on the patient, they seemed to have a critical character. After the injection the menses came on earlier and were more copious; all diseased organs and parts showed greater activity.

In cases of pulmonary tuberculosis in the first stage, a cure was effect-

ed in from three to five weeks. If fever is present this increases a little during the first eight to fourteen days, thereafter the temperature becomes permanently normal. If the temperature was normal before the injection it did not rise. The sputa are slightly increased during the first week, become yellow and cease altogether in about six weeks. By the end of two months physical signs are no longer detectable.

Pulmonary tuberculosis in the secondary stage is curable in most cases, but more time is required. The temperature rises during the first fortnight, then it declines. It rises again at the end of the second or beginning of the third month; then it becomes normal. The expectoration increases, sometimes very greatly, in the second month, then gradually diminishes and ceases in the fourth or fifth month. Night-sweats disappear in the first week. Redintegration* of the diseased portions of the lung, when it is possible, usually commences at the end of the second month.

The treatment has no good effect in the third stage of phthisis—on the contrary, the strength is thereby rapidly diminished.

The action of the remedy is most remarkable in lupus. During the first days after the injection the affected part commences to grow vividly red, rises up somewhat, and discharges moderately, and is the seat of shooting pains occasionally. Curative action usually begins in the third week.

In chronic nephritis, so long as there has been no shrinking of the renal parenchyma and no heart complication, the action of the formic acid injection is beneficial.

So also in carcinoma of breast and stomach. The tumor first increases in size and becomes very sensitive, and the skin over it feels warmer. The shorter the term the tumor has existed and the stronger the constitution of the patient, the sooner does reaction occur and the consequent cure of the disease.

We are of course unable to vouch for the efficacy of this treatment, as we know nothing from experience of the remedial power of formic acid; and have no knowledge of Dr. Krull. But the curious circumstance that he found, as he says, the formic acid useless in large and moderate doses, but efficacious in proportion to the smallness of the dose and to the length of time between the doses, is interesting to the disciples of Hahnemann, as these are two of the characteristic features of his practice. Formalin, the latest remedy for phthisis in the old school, is prepared from formic acid.

Hitherto not much use has been made of ants or their acid secretion in homeopathy. Laville (*Brit. Jour. of Hom.*, xxv. 679) made a tincture of the ants from a trituration, and says he administered it with success

in epilepsy. Formic acid is said to act specifically on the kidneys (Med. Times, Sept., 1845, p. 342, referred to in B. J. of H., xi. 338). In Vogel's *Materia Medica* a distillation of ants in alcohol, administered internally, is said to have aphrodisiac and analeptic virtues; externally applied is useful in atrophies and paralyses; boiled ants in a bath are good for rheumatic and atrophied limbs. The juice obtained from the eggs (meaning probably the larvæ) of ants by triturating them is employed for deafness and tinnitus aurium. In his *Apotheker Lexicon*, Hahnemann says that red ants and their eggs are dried and enclosed in a bag and applied warm to rheumatic and gouty limbs, but he does not know if they do good or harm. A large number of ants with or without their eggs, in fact a whole ant-hill of them, enclosed in a bag and boiled, make a nerve-strengthening cataplasm for paralyzed, shrunken limbs. Hahnemann tells how to make formic acid, but has no experience or knowledge of its use. It promises, he says, to be useful as a liniment in paralytic affections.

Tuberculosis, chronic nephritis, and carcinoma are not diseases in which we can claim a great amount of success. The remedial powers claimed for formic acid in these diseases by Dr. Krull may induce us to try his method, especially as his remedy, under the form of the animal source of the acid, is already introduced into our pharmacopeia, and its symptomatology affords what some "keynote" homeopaths may consider sufficient hints of its homeopathicity to some phenomena of these diseases. So when other remedies fail or cannot be discovered, we may take Solomon's advice and—

"Go to the ant."

—*The Homoeopathic World.*

"Give Unto Others."

Prof. JOHN URI LLOYD, PH. D.,
CINCINNATI, OHIO.

The writing of an editorial for another publication, suggests this paper. There is no doubt that in many cases we are misunderstood as a people, or rather as a sect, and in a way that takes from us a credit we deserve and have earned. We claim that we select or elect the medicines we use. This in itself, however, is but one step in defining our principles, and it wrongs us to rest our claims on this one thing. I do not know any physician of any school of medicine whatsoever who does not elect what to use, and who, according to his best judgment, does not so use them. He selects and he excludes as seems proper. It would be folly to argue that because Prof. Bloyer, who is an eclectic, selects, let us

say, rhubarb as a cathartic in a certain case, the members of another school, in using rhubarb, do not select it? And it would no less be folly to say that they have no right to select the best cathartic they know of to answer their purpose. To rest the weight of our school on this one argument of electing or selecting that which is best, neither defines our position nor justifies our existence. It is like describing a four-legged horse as an animal that stands, walks, trots and runs on one leg only. But my purpose is not to present the principles of eclecticism; others can do that better than myself. My object is to say, yes we do select from others that which is best, and in return we give to others the best we have. My aim is to deny that we are a nest of parasites living upon what others have discovered and have developed, without giving anything in return. We have been fair as man to man; we have delved and dug beneath the earth, and in untrodden fields have culled from its surface. We have taken that which others have proven good, and handed back to them riches that we have discovered. Our materia medica is not a pilfered, stolen collection of other men's goods. It is made up of what we have heired as a right from the world behind us, and have tested and developed further, and to which we have added, as a duty, our mite. Give the regular school in medicine credit for developing such valuable remedies as quinine, opium, potassium iodide, and a host of similar remedial agents that we use. Give the homeopathic school credit for discovering aconite, apis, pulsatilla and others invaluable to us. Then turn to ourselves, and ask if we, too, are not entitled to similar credit for our leptandra, echinacea, baptisia, collinsonia, polymnia, and a very multitude of drugs that, but for us, might be slumbering unknown. Give the regular school credit for its great work in diagnosis of disease, and in anatomical and physiological researches, from which we all profit. Give the homeopathic school credit for its development of the sanitary art in medicine, and for teaching the great lesson in kindness to the sick, and give us credit for the study we have made in specific medication, and the art of selecting the remedy for the indication that cries for that one remedy.

"Give unto others" has been our watchword for seventy-five years, and its companions have been work and search. From all over this great country comes recognition of our patient research. Never before did eclectic medicine stand as firm; never before has eclectic medicine been in demand as it is at present. Our physicians find listeners in other schools ready to hear what is to be said; they find questions ready to ask for information concerning that which we have to offer in return for what we have received. Not a physician who reads this paper but can recall how this or that physician of a rival school has been indebted to him for information concerning our materia medica and our medicines. Not a physician

who reads these lines but finds eclectic medicine in original bottles on the shelves and in the hands of practitioners of his neighborhood. And not a man who reads this paper but will agree that its title is fair when applied to the eclectic. He selects what is best, and he also gives to others from what he finds best. And, in addition to invaluable drugs, eclecticism has evolved elegant forms of remedial agents and invaluable principles in therapy. These, too, we do not cover under a bushel. Whoever wishes to study our methods has access to our colleges; whoever wishes to employ eclectic remedies can find them in every city in America. As it is a satisfaction for us to thus give credit to the other schools for both their works and their remedies, so it is a satisfaction to be able to commend to them the things upon which we pride ourselves.—*Eclectic Medical Gleaner*.

Common Law Rights and The Physician's Prescription.

Jervy makes the following statements relative to the above subject:

1. The patient has no legal nor other right to demand a written prescription or written direction from the physician.
2. It is right and wise that the druggist demand and procure from the physician his written orders for the compounding of prescriptions.
3. The physician has the undoubted right to designate what pharmacist shall fill his prescription.
4. The written prescription is simply an order from physician to pharmacist. It is, through courtesy, and by virtue of custom and convenience, handed to the patient for transmission, but the latter has not at any time, the slightest right of possession in the instrument:
5. The druggist has, at least, the right of permanent guardianship (perhaps of outright possession) of the prescription, and he must keep it on file for reference and for any form of proper investigation.
6. There can be no right, extenuation, or excuse for a copy of a prescription, with physician's name attached, to be taken by druggist, patient or anyone else without the authority of a physician.
7. The careful physician should invariably retain on carbon paper a facsimile copy of every prescription he writes.
8. The druggist has a legal right to utilize any formulas that is uncopyrighted that may fall into his hands, but he cannot, unauthorized, use the name of its author in connection with it. In most states, however, statutes would bar selling intoxicants or other poisons except by direct order of the physician who wrote it, he does so on his own responsibility, and he has no legal nor moral right to leave or place the physician's name on the container.

New York Medical Journal.

MINNEAPOLIS HOMŒOPATHIC MAGAZINE.

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EDITORIAL.

The Minnesota State Institute.

The thirty-sixth annual meeting of the Minnesota State Homœopathic Institute will be held in Minneapolis, May 20-21-22. The presiding officer this year is Dr. H. M. Lufkin, of St. Paul, who is doing all that a president can do to insure the success of the coming meeting. Dr. Lufkin is too well known to need any eulogy. The secretary, too, is fairly well known. The treasurer, Dr. Margaret Koch, needs no introduction and will relieve you of your annual dues with neatness and dispatch, as if she were doing a surgical operation. The local committee of arrangements are Drs. O. K. Richardson, P. A. Higbee, Cora Smith Eaton and Annah Hurd, who will do themselves and Minneapolis proud in the matter of entertainment.

From out of the city are expected Drs. H. C. Allen and C. S. Neiswanger of Chicago. The former well known as an exponent of pure homœopathy and a bright and shining light in materia medica, as well as head of the Hering Medical College. Dr. Neiswanger is also as well known in his line as is Dr. Allen, being a professor in and president of the Illinois School of Electro Therapeutics.

Those of us who have listened to these gentlemen lecture will cer-

tainly be glad of another opportunity to hear them, and to those who have not met or heard them, we most sincerely urge that they do so at this time. The program is well under way and the bureau chairmen have certainly done well, and we are confident that this year's session will be one of the best, if not the very best of them all.

Hahnemann Dinner.

On Thursday, April 10th, at the Commercial Club in Minneapolis, occurred the annual Hahnemann Dinner given by the faculty of the College of Homœopathic Medicine and Surgery of the Medical Department of the University of Minnesota, to the students of the college and invited guests.

After the discussion of a gastronomic feast, Dr. A. P. Williamson, dean of the college, who presided as toastmaster, introduced the speaker of the evening, Dr. W. H. Leonard of this city, who spoke to the toast, "Hahnemann as a prescriber," giving a glowing tribute to the memory of the man we all are glad to honor and whose name we all revere. Other speakers were to have been present, but were unable to do so.

At the April meeting of the Minnesota Medical Examining Board a license to practice was issued to Dr. L. A. Ward, Bemidji, Minn.

NEWS AND NOTES.

The Minnesota State Homœopathic Institute meets in Minneapolis, May 21, 22 and 23, 1908. H. M. Lufkin M.D., St. Paul, President; Henry C. Aldrich, M.D., Minneapolis, Sec'y.

The Minneapolis Homœopathic Medical Society meets on the second Wednesday eve of each month; Henry C. Aldrich, M.D., President; Adele S. Hutchison, M.D., Vice-President; O. K. Richardson, M.D., Secretary.

The State Medical Examining Board holds its examinations at the State Capital building in St. Paul, the first Tuesday in January, April, June and October, C. J. Ringnell, M.D., Minneapolis, Secretary. The homœopathic members are Adele S. Hutchison, M.D., Minneapolis; Thos Lowe, M.D., Slayton and A. B. Cole, M.D., Fergus Falls.

"The Cow Pea" is the title of the latest publication issued by the Experiment Farm at Southern Pines, N. C. This book neatly bound and illustrated in plain and concise manner discusses the value and uses of this important crop, the Cow Pea. Every reader can get a copy free by writing to the Superintendent of Experiment Farm, Southern Pines, N. C.

Dr. G. B. Cross, (Chgo. Homœo. '01), has located at Plainfield, Iowa.

Owing to alleged ungentlemanly conduct on the part of some students during gynecological clinics at Cook County Hospital, Chicago, all public gynecological clinics have been abolished—a great hardship for the student body on the West Side certainly.

Dr. W. G. Condit has removed from Chicago to Des Moines, Iowa.

Dr. H. H. Bingham has been appointed a member of the homœopathic staff of the Minneapolis City Hospital and has charge of all the contagious disease cases for the next two months, during which period Mr. E. L. Hall of the senior class of the College of Homœopathic Medicine and Surgery of the University of Minnesota, will be interne of the contagious ward and will then succeed to the position of hospital interne now filled by Dr. Harry E. Sutton.

Dr. E. D. Strong (Hahnemann, Chgo., 1901), and recently resident physician at the Garfield Park Sanitarium in the city of Chicago, has located at Bradley, S. D.

Drs. Thos. Lowe, of Slayton, and A. B. Cole, of Fergus Falls, were in the twin cities in connection with the meeting of the State Board of Medical Examiners recently.

Sanitary Rules for Barber Shops.

The Health Board of San Francisco has taken an important and commendable step toward the sanitary regulation of barber shops. The rules formulated by the Board, and given herewith, have been submitted to the supervisors with the view to their adoption as an ordinance. This action, it is believed, will receive the endorsement of the State Barbers' Examiners. All barber shops should be required to observe the rules of aseptic cleanliness as a public safeguard. It is remarkable that so few of the many thousands who patronize these places of business become infected. Epidemics of barbers itch, however, are more frequent than they should be, and, no doubt, other contagious diseases are disseminated through the disregard of sanitary measures by barbers. The rules referred to above are:

Mugs and shaving brushes shall be sterilized by immersion in boiling water, after separate use thereof.

Razors should be wiped with alcohol both before and after they have been used.

Hair brushes known as "sanitary brushes" must be used after first being sterilized.

Razor strops must be kept clean and never wiped off with the hand or blown upon with the breath.

A separate clean towel shall be used for each person.

Barbers shall not blow away with breath any hairs after cutting, but use a towel or bulb or hairbrush.

Barbers shall keep their finger-nails short-cut and clean; alum or other material used to stop the flow of blood shall be so used only in powder form and applied on a towel.

The use of powder-puff, finger-bowls and sponges is prohibited.

No person shall be allowed to use a barber shop as a dormitory.

All barbers' instruments must be disinfected after using.

These rules shall be placed in a conspicuous place in the shops.

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Pathology of the Blood in Diseases of Children.

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ST. PAUL, MINN.

Prof. Diseases of Children, University of Minnesota.

A half century of investigation into the physiology of the blood has culminated in the last decade, in a remarkable concentration of research work in the laboratories of the world, which has so simplified technique that like clinical bacteriology, investigation of the blood is now a legitimate and necessary accessory to the general practitioner's ready aids to diagnosis.

The present generation of students leave college amply equipped for a work which, within the memory of most of us, was the prerogative of the finest equipped laboratories and special training. While general works on internal medicine devote space to the pathology of the blood, works on diseases of children have treated the subject meagerly if at all. To Rotch, of the many pediatricists, are we indebted for an elucidation of the clinical aspect of the blood in relation to diseases of children, and to a proper emphasis of the need of more systematic study in this field.

Origin of the Blood Cell.

The origin of the different elements of the blood is as yet not fully developed. The red cell is said to follow the development of the capillaries and blood vessels in the embryo. The function is later transferred to the rudimentary liver and lymph nodes, finally in later foetal life to be assumed by the bone marrow.

In infancy the cavities of all bones contain almost entirely red bone marrow. At birth the red cell is non-nucleated, yet considerable numbers of nucleated cells, are found in the liver and spleen up to the sixth month of life. Ewing, suggests that "In the acute and chronic anemias

of infancy, the facility with which the spleen and liver resume their former role of red cell production, partly explains the special involvement of these organs in such diseases.

Physiological Peculiarities.

The limit of size of the normal red cell in the adult is 6 to 9 millimeters in diameter and 1 m. m. in thickness. Variations from these measurements are considered pathological. During infancy both larger and smaller forms occur which are normal.

During early embryonic life, and up to the seventh month of foetal life the red cells are nucleated. These nucleated red cells or erythroblasts it is claimed may be found normally as late as the sixth month of infancy.

The blood count at birth shows an increase of several hundred thousand over the adult standard. This, however, rapidly decreases to the average adult count of 5,500,000.

Haemoglobin is likewise increased the first two weeks of life, later decreasing below 100 per cent and varying between 55 and 90 per cent. After six months it resumes the normal standard of 100 per cent.

The White Cell.

Leucocytes. To the white cell or leucocyte must be attached the greater significance in the diseases of children.

There is supposed to be a common origin for both white and red cells in the so-called "wandering cell."

The seat of production is first in the embryonal liver. In later embryonal life the function is transferred to the lymphoid and adenoid tissues—lymph nodes, spleen, marrow and thymus gland.

In the adult the reproduction of leucocytes is limited to the lymph nodes, spleen and marrow.

The adult average leucocyte count is 7,500 to the c. m. It is not until the sixth year that the child's blood exhibits the same relative count. At birth it is 10-1400, gradually diminishing to the sixth year, when it is the same as the adult.

Special Pathology.

The histological differences between mature and immature blood as exhibited in the infant and the adult, must be taken into consideration with reference to pathological changes in the blood incident to the diseases of children.

For purposes of classification, the red and white cells are to be distinguished as occurring in various sizes and shapes. They are further classified by the contents of the cell and character of the nucleus. Then again by the manner in which the cell contents receives or reacts toward the various stains.

To simplify the brief review I shall give of the special pathology of

the blood in children's diseases, the more important of the groups of cells thus classified is here given.

The red cell occurs as:

1. *Erethrocytes*.—The common red blood disc. (a) *Microcytes*, small red cells. (b) *Megalocytes*, large red cells (from 10-20 m, in diameter).

2. *Normoblasts*. The nucleated red cell, of normal size and character. *Megaloblasts*—Unusually large nucleated red cells (10-20 m. m.) *Gigantoblasts*—Nucleated red cells exceeding 20 m. diameter. *Microblasts*—Very small nucleated red cells.

Leucocytes present the following chief varieties:

1. *Lymphocytes*. Small leucocytes with large nucleus, nearly filling the cell, and staining deeply.

2. *Mononuclear leucocytes* and *polynuclear leucocytes*, twice the size of the red cell, with relatively small faintly staining nucleus.

3. *Transitional forms*, distinguished by the indented or lobulated nucleus.

4. *Neutrophile leucocytes*, polymorphous nucleus which takes basic stains. Plasma takes neutral aniline stains and the granules of the plasma receive a combination of acid and basic stains.

5. *Eosinophile leucocytes*. Cells of varying size, large and small, whose protoplasm contain large granules, which take a strong acid stain, and whose nuclei take a faint stain of nuclear dyes.

6. *Myelocytes*. These are pathological cells, found only in abnormal blood. They are large cells with granular protoplasm taking neutral or acid stains, having one faintly staining nucleus. Three varieties of these cells are distinguished. Two kinds have the neutrophile granules, i. e., take the neutral stains; and one, the eosinophile granules, take the acid stain, and resemble the eosinophile cell, but for having a single nucleus.

Leucocytosis and Olegocythemia.

These constitute two general classifications.

1. *Leucocytosis*.

Leucocytosis is of considerable significance with children owing to its frequent occurrence in connection with acute and chronic local and constitutional diseases, and as an important aid in the differentiation of several diseases.

It occurs physiologically after meals, the normal leucocyte count ranging as high as 30,000, two hours after eating.

Leucocytosis occurs in the following diseases common to children:

Peri and endocarditis, erysipelas, septicæmia, pleuritis, osteomyelitis, purulent meningitis, scarlet fever, diphtheria, variola, appendicitis, profound anemias, leucæmia, hemorrhage, malignant growths, abscess.

The presence of leucocytosis in these affections enables a differential diagnosis to be made from the following in which it does not occur, or in which the white cell exists in normal numbers.

Tuberculosis in early stages, i. e. before mixed infection has occurred, malaria, tubercular meningitis, tubercular and serous peritonitis, influenza, measles and typhoid fever.

The normal relation of the leucocyte count of children and adults should be borne in mind in this connection. The following table from Rotch is instructive: ,

	Adults.	Infants.
Small mononuclear.....	24-30 per cent.	50-70 per cent.
Large mononuclear.....	3- 6 "	6-14 "
Neutrophiles	60-75 "	28-40 "
Eosinophiles	1- 2 "	½-10 "

The particular variety of cells involved in leucocytosis, the lymphocyte plays the most important role in children. Normal per cent of lymphocytes in the adult blood is 27-30 per cent. At birth it is 50 to 66 per cent, gradually decreasing with the 10th to 14th year when the number corresponds to the adult percentage.

When the lymphocytes are increased to above normal it constitutes lymphocytosis. It is found a common accompaniment of all forms of faulty development of children.

The diseases with which lymphocytosis is chiefly associated are rachitis, all the infectious diseases of children, diphtheria, pertussis, measles, scarlet fever, smallpox and broncho-pneumonia.

"In general, lymphocytosis seems to result from mechanical discharge of cells from lymphoid structures, aided by diminished blood pressure and increased flow of lymph."—Ewing.

Leucæmia.—A rare disease under ten years of age.

The two varieties present a different blood pathology.

1. *Spleno-myelogenous* form. Increase of the white cell to 1-18 and as high as 1-2½ of the red.

The Myelocyte, three forms, show the greatest increase—being as high as 20 per cent of the leucocytes.

Eosinophiles, which normally number only ½ to 10 per cent are increased.

Lymphocytes are decreased.

Haemoglobin is relative to the number of red cells, which are somewhat decreased.

The lymphatic leucæmia exhibits a marked leucocytosis, the relation of white to red being about 1-15.

Of the white cell the lymphocyte predominates up to 90 per cent of

the entire leucocyte count. Such a relation is pathognomonic (normal 25-60 per cent.)

2. Olegocythemia.

Olegocythemia constitutes the second large classification of blood diseases, and applies to primary and secondary anemias dependent upon a reduction of the number of red cells.

1. *Von Jaksch's anemia infantum pseudo-leukemica.*

This affection is confined to children under two years of age, and exhibits the following haemology.

Red cells. Markedly decreased in numbers, the average being 1,500,000 to 3,500,000.

Nucleated red cells (normoblasts) may be excessively increased, and some of them are found to be undergoing mitotic division.

The normoblasts may, however, be entirely absent.

The normoblasts when present may be much increased in size, constituting the megaloblast type of cell.

Leucocytes—increased 20,000 to 50,000 to the c. m. (10-14,000, normal.)

Of these the *mononuclear* cell constitute 80 per cent (50 per cent normal).

Eosinophiles vary in number.

Myelocytes occurs but only in small numbers.

Progressive Pernicious Anæmia.

Progressive pernicious anemia is the gravest form of anemia. The red cell is reduced to as low as 200,000 per c. m. One million is not an unusual blood count.

The diagnosis depends upon the presence of normoblasts, or nucleated red blood cells, and of an excess of megaloblasts (large nucleated reds) over the normoblasts. These constitute 33 to 90 per cent of the red cells. However numerous the megaloblasts may be, they should outnumber the normoblasts.

"A single megaloblast or giantoblast in pathological mitosis is pathognomonic of pernicious anemia." Hemoglobin is increased in the individual cell, though it is relatively decreased.

Poikilocytosis is present.

Leucocytosis is generally present. The diagnosis rests upon one or more of the following conditions:

1. Numerous megaloblasts and myelocytes with increased haemoglobin.
2. Thirty-three per cent of megaloblasts with increased haemoglobin.
3. An excess of megaloblasts over normoblasts. It cannot be made upon a reduction of the red cell alone. (Ewing.)

Chlorosis.

This disease may occur in children. The principal alteration of the blood is the reduction of hæmoglobin. The red cells show a marked paleness, especially in the center, where there may be no color visible.

A low hæmoglobin index is indispensable to a diagnosis, and this may be as low as 20 per cent. Poikilocytosis may be seen in severe cases, though it is not marked.

In conclusion much might be said of secondary anemias of children. It has been my object to emphasize the growing importance of the hæmatology of infancy, and to indicate a few special features of the subject.

I am indebted to Rotch, Ewing and other authorities for the substance of this paper.

Osteopathy.

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MINNEAPOLIS, MINNESOTA.

Most medical men concede that the osteopath can secure good results in the treatment of all diseases in which massage, or Swedish movements are ordinarily prescribed.

The use of manual therapeutics may be continued even into the treatment of acute conditions. The heart may be made to beat more slowly or rapidly, the temperature of the body reduced during a fever and the physiological actions of most drugs may be secured by manual treatment.

The knowledge of how this may be done is not original to osteopaths the facts are scattered throughout medical literature. It is because they are so scattered that they have not been appreciated.

I have found references to some of the so-called new theories in books two hundred years old and these references are in many instances quotations from more ancient authors.

So far as I can learn the first form of healing the sick of which we have any record was by manual treatment and is recorded in ancient Chinese records. Next in use was drugs, which were used in such an excess as to cause a return to more simple methods and then again a return to drugs which is now gradually giving way to the use of other remedies but I do not think that drugs will be entirely supplanted.

The osteopath has come into prominence because he has gathered together the facts about manual therapeutics which were lost in the vast amount of medical literature and he has improved or added to many of these facts.

He has been able to secure results in cases that were absolutely incurable by other methods.

During the first few years that osteopathy became known to the world as a separate school of practice much was made of the good results secured on many of these so-called incurable cases.

Some of these cases had been all over the world seeking for health, and were ready to try anything new. They had the money and influence to make the cure of their case one that would be heralded all over this country.

Six or eight years ago, when I was at home in Kirksville, Mo., I have seen almost a colony of private cars on the side track; their owners were there to take osteopathic treatments.

At the present time osteopathy is beginning to get down to a normal basis, and I am glad to say that in most places and with the better educated osteopaths, is losing its side-show methods.

I do not think the osteopaths should maintain a separate school of practice, but until the medical colleges establish chairs of manual therapeutics that are supported by the controlling board and faculty of the college in such a manner as to compel the respect and attendance of the students, the osteopaths are justified in maintaining separate teaching schools.

In the medical colleges that make even a pretense of teaching manual therapeutics the course is elective and the student may or may not attend the demonstrations.

Referring to a previous statement that the heart may be made to beat more slowly: This may be proven by any physician if firm and steady pressure be made on each side of the neck close up to the skull and to the sides of the origin of the trapezius. If a count of the pulse is made before the test and a count is made during the test, the pulse will be noticed to become slower and the arterial wall softer. This is due to a depression or inhibition of the cervical vasomotor nerves.

To reduce the temperature during a fever the osteopath aims to secure an increase in heat radiation and heat dissipation. Depressing or inhibiting the vasomotors of the cervical and lumbar regions causes a flushing of all the peripheral capillaries of the entire body, thus relieving the engorged centers, and by the sweating that follows the body is cooled. This treatment is augmented in many instances by the use of hydrotherapy.

In the *Journal of the American Medical Association* for April 26, 1902, page 1096, there is a description of how the Japanese produce narcosis by compression of the carotid artery with the thumbs. The narcosis is complete for a few moments and there is no vomiting afterwards.

Because of its easy application and no bad after effects, L. Steiner, the author of the article, uses this method of producing narcosis in such minor operations as opening inguinal abscesses, etc.

The amount of urine passed depends upon the amount of blood and the blood pressure in the kidneys. A lesion in the lower dorsal vertebræ, or stimulation or inhibition of the nerves of this area, would affect the vasomotor nerves of the kidneys and thus secure an increase or decrease of the blood supply of these organs.

The one great fault with the osteopathic management of acute cases is the treatment of them. In some acute cases a treatment is required as often as once an hour during certain periods, and generally from two to four times a day.

If an osteopathic practitioner has a large office practice and several very acute cases, he will be a very busy man.

Because of the fact that the osteopath is handicapped in this manner in the treatment of acute cases the practice of osteopathy will, in all probability, be largely confined to office work, and to chronic cases.

Comparative Values of the Induction Coil and Static Machine Therapeutically Considered.

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G. G. Burdick, M. D., Prof. Radio-Therapy III. School of Electro-Therapeutics, Associate Prof. Surgery Post-Graduate Medical College, Chicago, a man who has had a large experience in the use of both instruments, says, in an article published in the *X-Ray Era* of March, 1902: "Physicians with static machines should expect to be disappointed if they attempt the treatment of the deeper structures with the x-ray. So little *current* is generated by the best machines even, that in order to pass the light through the body too high a vacuum is necessary." By "current" I understand the doctor to mean amperage. In a personal letter to me, the same author gives 19 reasons why he prefers a coil. Those pertaining more especially to the therapeutic value are as follows:

1. "The increased penetrating power of the ray from the coil due to the increased amount of amperage going through the primary of the coil," "available for work at will."
2. "The flexibility of the apparatus, the user being able to vary the voltage as well as the current, and may leave one as a constant and vary the other as desired."
3. "The ability to use any tube on the market from the toy to the largest."
4. The ability to work at some definite standard." After giving the nineteen reasons for preferring the coil, he says: "I could keep on giving you reasons for several pages."

Dr. H. P. Pratt, of Chicago, who published the first report of a treatment by means of the x-ray, in the *Chicago Medical Times*, July, 1896, and who has steadily worked and experimented with the x-ray, both therapeutically and otherwise, says also in a personal letter: "The coil will do much better work than the static machine, from the fact that it is possible to vary the amount of current used."

Dr. E. H. Grubbé, Prof. of Electro-physics and Radio-Therapy in the Ill. School of Electro-Therapeutics, sends me a letter, extracts from which explain themselves:

"There are very many reasons for using the coil instead of the static machine for obtaining the x-ray, more especially if the x-ray is to be used therapeutically. The principal reason for using the coil is the fact that due to the great amperage of the coil current we can accomplish in a very short time what would take a long time to bring about with a static machine. My experience teaches (and you know personally that I have ample opportunity to gain experience, treating as I have on an average of over eighty cases each day for many months, and using eight different instruments for obtaining x-rays, viz: One 36-inch coil, one 15-inch coil, three 12-inch coils, one 8-inch coil, one 16-plate glass static machine, one 24-plate glass static), that it takes 40 minutes to do with my static machines what can be accomplished with a 12-inch coil in 10 minutes. The above are a few of the reasons why I use a coil in x-ray therapeutic work. I am aware that opinions differ, and believe we are still in the A B C of knowledge regarding this powerful agent. Dr. F. H. Williams, of Boston, who has written the finest work on 'The Roentgen Rays in Medicine and Surgery,' uses a static machine, which he states on page 10 has four revolving plates *six feet* in diameter, and four stationary plates 6 feet 4 inches in diameter, weighing 1,000 pounds. Dr. Wm. Rollins, a co-worker of his, and frequently quoted in his work, uses 'the largest static machine ever made,' having double the number and the same size plates as that of Dr. Williams. Few can afford such machines, if they have room for them."

SELECTIONS.

Antidotes in Cases of Morphin Poisoning.

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In order to understand the use of antidotes, it is necessary to have respect for the symptoms and the period in which these occur.

In usual cases the symptoms appear in from twenty to forty minutes

after the poison is taken. All conditions which favor rapid absorption bring about earlier effect. With this poison, as with most others, there is a wide deviation of the symptoms, due to the individuality of the patient, his condition at the time and the quantity of the poison taken. When the quantity is very much larger than just a fatal dose, the symptoms throughout bear the character of the comatose period. When the quantity is a barely poisonous one, the symptoms of the stage of exaltation and increased heart action are prolonged.

SYMPTOMS.

The regular or usual course of symptoms runs about as follows. There is first a sense of exhilaration of the mind and comfort of the body, the pulse being both quickened and strengthened. Then dizziness and heaviness occur, with nausea and languor, and ere long drowsiness comes on. The pulse is first reduced in frequency, afterward reduced in force. Vomiting is a frequent, not universal, result, but when it is delayed it seldom secures a full evacuation of the stomach. The desire to sleep steadily increases and returns from time to time after being overcome. There is a gradual loss of muscular power and lessened sensibility of the surface. Contraction of the pupils of the eyes is a characteristic symptom, and is quite constant, not invariable, beginning after the period of excitement. The sensitiveness of the conjunctiva is diminished, and the pupils fail to respond to a strong light. The one symptom to be most regarded is that of the respiration. The respirations gradually decrease in frequency, in some cases becoming reduced to three or four in a minute. The breathing is then stertorous, and sometimes the respirations are short. In some cases after twenty or thirty respirations there is a pause, appearing periodically, sometimes reaching to half a minute. As the breathing begins after the pause it is at first quite rapid. In some cases, however, the rate of the respiration is gradually reduced from first to last.

It should be understood that the respiration gives an index not only of the course of the poison, but also of the benefit of the antidote and the prospect of recovery. As the respiration fails, the loss of its effect in the blood becomes obvious, the face grows blue—cyanotic as it is termed by medical men—the extremities get cold, and the general temperature is lower. In this stage the system suffers under two poisons, the morphin at the nerve centers and the excretory carbon dioxid of suffocation. The surface is apt to be moist. Retention of urine often occurs. At the last, when the pulse becomes very slow and weak, the pupils sometimes dilate. Convulsions are infrequent with adults, less infrequent with children. When the vomiting is excessive, it is sometimes accompanied with diarrhea. Generally, all the secretions are checked except those of the skin.

When the poison is taken in repeated portions, the earlier and later stages fail to be distinct, and the prospect of recovery depends upon the rate of elimination of the poison compared with the frequency and quantity of the dose.

Fatal acute cases show a duration of symptoms of from six to twelve hours. Cases are recorded of the occurrence of death as early as forty-five minutes after the poison is taken, and as late as four days.

FATAL QUANTITY.

It is fair to say that two grains of morphin sulfate is such a poisonous quantity as to endanger the life of an adult of ordinary susceptibility. It is well known that children are relatively more sensitive to opium poisoning than to the action of most other narcotics. Adults differ from each other according to the resistance of the respiratory system, respiration being nature's means of recovery. It is stated by some authorities in toxicology that the average fatal quantity, for adults, is from three to six grains of morphin.

But in fact, any amount of morphin which is above the just limit of a medicinal dose, whether liable to be fatal or not is a poisonous quantity, or borders upon the same. As to what is the largest allowable medicinal dose, the physician will be governed in part by the nature of the disease or injury he is contending against. The maximum of regular medicinal doses—that is, the largest dose authorized for people at large, those of average susceptibility—has been fixed by the pharmacopeias of several countries. The German, British, Austrian and Swiss pharmacopeias give one-half grain of morphin or its salts in a single dose as the limits for adults. The maximum quantity during twenty-four hours is given at 1.5 grains by the pharmacopeias of Germany and Switzerland; at 1.9 grains by the pharmacopeia of Austria. The German pharmacopeia of 1895 gives 2.3 grains of opium as the maximum single dose.

TREATMENT.

The chief resources of treatment are the following: To remove the poison from the stomach. To arouse the respiration. The permanent treatment. Atropin administration as to respiratory stimulant and physiologic antidote under the discretion of a physician. Strychnin, strong coffee or tea, and other agents acting as stimulants to the respiration and circulation.

To remove the poison from the stomach is the first requisite. Generally, a simple siphon-tube, such as is used for the stomach, is the best agent for mechanical removal of the contents. If possible, the stomach should be washed out with an abundance of warm water applied two or three times. This should be done even if the poison has been taken in the hypodermic way, because of the considerable discharge of morphin

into the stomach from the blood. For the same reason it is well to repeat the washing out of the stomach from time to time. And it is desirable to test the discharges and washings of the stomach for morphin to ascertain when the poison ceases to appear in that organ. And in cases when abundant vomiting is obtained copious draughts of warm water should follow. Emetics are employed, and these must be resorted to whenever the opium has been taken in a mass, such as might fail to be removed by the tube. Ground mustard in teaspoonful doses, or sulfate of zinc in doses of 20 to 30 grains, is suitable. For hypodermic use apomorphin in doses of one-tenth of a grain is sometimes employed. Under this head may be given the use of agents for the precipitation of morphin or for its absorption into porous matters resisting solution. Tea, also tannic acid, have been recommended as precipitants, but really no final dependence can be placed upon them. No permanent precipitation of the alkaloid can be made in the stomach. A more promising measure is the administration of finely powdered charcoal suspended in water. Given abundantly, this serves well to retain the alkaloid for a time and delay its absorption into the circulation. The powdered charcoal can be given the first thing, after which methods of evacuation of the stomach are to be pushed as actively as though the absorbent had not been given. In the period of recovery from morphin poisoning a saline laxative or enema should be given.

To arouse the respiration. The stimulation of respiratory movements and of the muscular system generally is the main dependence. So long as the patient can respond to admonition he should be constantly urged to take effort in breathing. The stimulation of cold water applied to the face and back of the neck from time to time and the inhalation of ammonia may be employed. The patient is kept walking between two assistants. When other efforts fail, artificial respiration, about eighteen times a minute, should be resorted to. As already remarked, the rate of respiration serves to increase the effect of remedial measures. The state of the pulse is of comparatively lower value as a guide. The respiratory function is nature's resource for the conversion of morphin into inert oxidation products. The inhalation of oxygen as a means of oxidation in the blood, it is said, has not so far proved efficacious.

THE PERMANGANATE TREATMENT.

Treatment by potassium permanganate was introduced to the medical profession by Dr. William Moor, of New York, in 1894-96. His articles appear in Vol. 45 of the *Medical Record* and in the *British Medical Journal* for 1895. An article by A. P. Luff reporting on this subject appeared in the *British Medical Journal* for 1896, page 1193. Dr. H. C. Wood, in 1894, discussed this treatment in the *University Medical Magazine*, Vol.

6, page 747. An article by L. Sharp, in 1895, appeared in the *Therapeutic Gazette*, page 561, and again page 732.

The administration of permanganate by the mouth seems to be well supported upon good testimony. The hypodermic administration of the agent, though recommended by Dr. Moor, has not met with general approval. When the permanganate is given by the mouth it is advised to use it in doses about 1 grain larger than the quantity of morphin taken, or that supposed to be in the stomach. The permanganate is to be dissolved in 30 or 40 parts of water. Ten grains of it are dissolved in a half tumberful of water and this is administered in portions, at discretion, to supply the quantities just indicated. During the recovery of the patient it is advised by Dr. Moor that a very dilute solution, such as 1 grain to a tumberful of water, be given by the mouth, to act upon the small amount of morphin still being discharged into the stomach. The numerous cases of recovery under the permanganate treatment reported by Dr. Moor and various other physicians certify to a remarkable efficacy in this agent.

The rapidity of chemical action of potassium permanganate upon morphin can be verified by any one who will take the trouble to add the alkaloid to a dilute solution of the permanganate. The rapid extinction of the chameleon-red color of the solution marks the promptness of morphin oxidation. The first product of this oxidation is well known to be oxydimorphin. How much farther the oxidation is carried by this agent under the conditions which can obtain in the stomach cannot here be declared. When the agent is introduced directly into the blood, it must be considered to act physiologically rather than by direct chemic effect. Considered as an antidote, so far as it acts in the stomach, it is certainly to be classed as a chemic agent. It is an antidote that may, when necessary, be applied by the pharmacist as safely as any of the antidotes to poison. It is an agent not dangerous in its effects when some excess of it is administered.

In the statement made above that the hypodermic use of this antidote has not met with general approval, I do not desire to discourage inquiry into this method of administration. The recorded cases of remarkable recovery from opium poisoning when the permanganate has been used by direct introduction into the blood, constitute very strong testimony in favor of this treatment. For example, Dr. C. H. Callendar reported in 1894, in the *New York Medical Record*, Vol. 46, page 345, a case of a child of seven years not in good health who had taken 2 fluidrams of laudanum. The respirations were eight per minute, the pulse forty-six per minute and unsteady, the face pallid and shrunk, the skin cold and covered with sweat. Under treatment with hypodermic injections of the permanganate recovery was obtained. In another case given by Dr. T.

J. M. Lindsay, in 1895, in the *New York Medical Record*, Vol. 48, page 858, a woman of middle age had taken nearly a teaspoonful of morphin and was in a comatose state. Under the hypodermic treatment with permanganate there was recovery.

ATROPIN AS AN ANTIDOTE.

This remedy is one to be administered by the direction of a physician. It is not, however, any more out of the question in the toxicology of the pharmacist than many other antidotes which find a place upon the poison labels applied by pharmacists. Atropin serves as a respiratory stimulant, in this case, and almost without doubt it serves in some part as a physiologic antidote. It would be a mistake to infer from some of the cases of marvelous recovery by help of this agent that its physiologic effect is one directly and fully to neutralize the effect of the morphin. This would certainly be a dangerous dependence upon atropin in the treatment of opium poisoning.

A remarkable case of recovery under the hypodermic use of atropin was reported by Dr. C. H. Lewis, in 1879, *Detroit Lancet*, Vol. 3, page 193. The eminent pharmacologist, Kobert, in his work on poisons, in 1893, page 557, says that he himself has used atropin in treatment of opium poisoning for fourteen years, following von Graefe and others. He uses hypodermics of one-sixtieth of a grain every thirty minutes till the pulse improves and the pupils enlarge. Dr. H. C. Wood, in an article published in 1893, gave favorable opinion of the use of atropin as a respiratory stimulant, combining its effect with that of strychnin. In the case of Dr. Lewis, already cited, a woman had taken by mistake about a half tablespoonful of morphine sulfate. An hour later a moderate emesis had just been obtained, and then the stomach was well washed out. Atropin sulfate was given hypodermically, at first one-twenty-fourth of a grain, then at intervals of fifteen minutes one-sixteenth of a grain, and later in portions of one-eighth of a grain. Coffee fluid extract was given hypodermically and frictions were applied; also the faradic current. About the fourth injection of atropin the pupil had begun to dilate and in an hour had covered about one-half the iris. They remained at this degree of dilation, and utterly irresponsive to light, with conjunctiva insensible to touch. During the dilation of the pupil the respiration continued to grow more slow and shallow, the pulse more frequent and feeble, the surface more cold and pale, with increasing torpor. Still the administration of the atropin was heroically continued for six hours, and in all one and one-sixteenth grains were given subcutaneously. The patient began to rally five hours after the first of the atropin was given. The period of profound coma was fourteen hours. The recovery was complete. In the administration of this remedy the indications of the respiration are a better guide than the effect upon the pupil of the eye.

Strychin, strong coffee or tea and other agents acting as stimulants to the respiration and circulation. Among the remedies of this class, hot footbaths, mustard applications, and frictions are very serviceable. Strong coffee has already been mentioned and hypodermics of caffen are more effective. If strychin is to be given, hypodermic doses of one-thirtieth of a grain are advised (H. C. Wood). Cocain hydrochlorid has been recommended in hypodermic doses of one-fourth to one-half of a grain.

ELIMINATION OF THE POISON.

An interesting hospital case in treatment of opium poisoning was reported by L. P. Hamburger in 1894, in *Johns Hopkins Hospital Bulletin*, Vol. 42, page 94. The interest of this case lies in the analysis of the washings of the stomach, together with anaylsis of the urine. A Chinaman had taken 10 grains of opium. Seven and a half hours after the poison was taken the stomach was very thoroughly washed out. The washings responded clearly to chemic tests, both for morphin and for meconic acid. At the same time the urine drawn away by a catheter gave tests for morphin. Within a period of from ten to thirteen and a half hours after the poison was taken—that is, from three to six and a half hours after the stomach was first thoroughly washed out—portions of washings of the stomachs were taken at intervals and tested for morphin and for meconic acid. These portions showed the presence of morphin, but failed to show the presence of meconic acid, during this period of three and a half hours. Granting that the tests were sufficiently delicate for meconic acid, as well as for morphin, and this the writer of the report does not seem to doubt, the results show that morphin must have been discharged from the blood into the stomach during the period mentioned. This is only a verification of the general statement of pharmacologists that during the action of morphin as a poison it is being discharged at some rate from the blood into the stomach and intestines. It is in view of this that repeated evacuation of the stomach, washing it out by help of a stomach tube or otherwise, is a remedial measure that should not be neglected. For the same reason Dr. Moor advised the administration of small doses of permanganate by the mouth during the later period of opium poisoning.

DISPOSITION OF MORPHIN IN THE BODY.

The authorities state that in acute poisoning morphin is eliminated largely through the mucous membrane of the stomach and smaller intestines, either without change or changed but slightly. The urine receives but small quantities and these are variable. Dr. T. G. Wormley, in 1891 (*Chem. News*, pages 62 and 65), reported upon an examination of the urine of six persons who had taken morphin. He found it present in all of the cases, but in four or them indication of only a trace was obtained,

such a trace as earlier methods might have failed to reveal. In the remaining two cases considerable quantities of the alkaloid were found in the urine. Without doubt morphin is mainly gotten rid of by oxidation in the blood, and the alkalinity of the blood promotes the change. The products of the oxidation are not well known. Toxicologists are inclined to make postmortem tests for oxidimorphin. Morphin itself has been many times recovered from the blood of animals poisoned with it. Morphin has been found in the liver, in the gall bladder and in the kidneys. It has been found in the brain.

If the diagnosis of morphin poisoning be in doubt, the urine ought to be examined, if it can be done in time. But the probability of finding it in the washings of the stomach is much greater.

An investigation of the deposition of poisons in the body, a reported case of the chemist Dragendorff is of interest. A man twenty-four years of age, accustomed to taking morphin constantly, died of strychnin poison, ipecacuanha being used in treatment. No alkaloid was found in the stomach. In the small intestine no morphin or emetin was found, and but very little strychnin. In the large intestine traces of strychnin, but neither morphin nor emetin. In 130 grams of blood from the abdominal cavity a trace of morphin and undoubted traces of strychnin. In the liver traces of strychnin. In the gall traces of both morphin and strychnin. In the brain traces of strychnin. In the second vomit no morphin, distinct trace of strychnin, much emetin. In the third vomit morphin uncertain, distinct reactions for strychnin and for emetin. In the fourth and fifth vomits distinct traces of morphin, neither strychnin or emetin.—*The Trio*.

Fermentative Conditions Associated with Chronic Gastritis.

JOHN O. HEMMETER, Ph. D., M. D.

The question of the most effective treatment of fermentation associated with chronic gastritis necessitates an exact definition of the term "fermentation." What is fermentation? It signifies the decomposition of complex molecules under the influence of organized or unorganized ferments. The organized ferments that accomplish this in the human stomach under certain abnormal conditions belong to the class of bacteria. The unorganized ferments are those that are secreted in the digestive juices. If, therefore, an individual changes starch into sugar by the ptyalin of his saliva, he has a process of fermentation going on in his stomach. This is a normal occurrence. Aside from this, a certain degree of fermentation by bacteria occurs normally. Thus Sticker has given the evidence that the simple passage of carbohydrate food through

the mouth is sufficient to generate traces of lactic acid, which are capable of demonstration by delicate re-agents.

We have then a normal fermentation by unorganized ferments, and traces of a fermentation due to bacteria also occurring in apparently normal stomachs. The question is, what constitutes a normal, and what constitutes an abnormal fermentation? Here our clinical methods leave no room for doubt. We have only to distinguish between the gaseous and the liquid and solid products of fermentation. The gaseous products can be determined quantitatively by filling the gastric contents to be tested in a fermentation tube, such as is commonly used for the determination of sugar fermentation in diabetic urine. The fermentation tube is filled with the gastric contents, which are well mixed, and placed in an incubator at the temperature of the body. This method of determination of the fermentative gases of the stomach is employed systematically at my laboratory. Frequently the gastric contents are so rich in bacteria that any sugar that may have been present originally has already been decomposed. It is wise, therefore, in cases of suspected extreme fermentation, to add about one grain of glucose to the fermentation tube before placing it in the incubator. If such tests are made methodically, a very striking difference between the gastric contents from various individuals will be observed. The contents of some normal stomachs will show no gaseous production even at the end of forty-eight hours. The stomach of advanced motor insufficiency and pyloric stenosis will show an extremely rapid fermentation and development of gas, within two to three hours. The gases formed are acetylene, marsh gas, carbon, dioxid, hydrogen, oxygen and nitrogen.

The exact identification and quantitative determination of each of these gases has no diagnostic significance. The point to determine is the total quantity of gases evolved, and the time in which they are formed. It will thus be learned that rapid and abundant gas formation is an evidence of stagnation. If an abundance of gas is rapidly formed, and the gastric contents contain a marked amount of lactic acid, and no free and combined HCl, we will have to think of pyloric stenosis due to carcinoma.

It is unfortunate that the terms fermentation and putrefaction are very frequently used as synonyms in American medical literature. I have long ago suggested that the term fermentation should be used only to designate the decomposition of the carbo-hydrates. There are four kinds of this sort of fermentation: (1) Lactic acid; (2) butyric acid; (3) acetic acid, and (4) the yeast fermentation. These form various products which may recombine among each other. In the stomach the most characteristic products thus finally evolved, besides the acids mentioned, are (1) alcohol; (2) methane CH_4 ; (3) ethylene, and (4) sulfuretted hydrogen.

Putrefaction should be applied only to the decomposition of the albuminous or proteid bodies. Whilst a few of the same products result which we have learned to know in connection with carbohydrate fermentation, the majority of the products of putrefaction are entirely different from those resulting from fermentation.

Products of Putrefaction.—(1) NH^3 , N, CO^2 H^2S , methylmercaptan, cystin.

(2) A series of amido acids, leucin, and asparaginic acid, etc.

(3) The aromatic derivatives of benzol, such as phenol, cresol, phenol acetic acid, indol, skatol, tyrsin, etc.

It will thus be seen that fermentation occurs only in the upper part of the digestive tract, but that putrefaction occurs mainly in the colon. There are good reasons for believing that the H^2S which is found in the stomach is a product of proteid putrefaction, and not of carbohydrate fermentation.

Having now arrived at a definition of the term fermentation, and its products and limitation, let us consider it in connection with chronic gastritis. In the first place, let me emphasize that fermentative processes of an intensity requiring special treatment are rare in chronic gastric catarrh, in my experience.

Too often chronic gastritis and fermentation are associated as necessary concomitants. This is a mistake. The opinion has disseminated that fermentation is a frequent consequence of chronic gastritis, whereas in reality this disease, as such, is by no means directly concerned in the production of fermentation. Pathologic fermentation—to repeat once more, the advanced decomposition of carbohydrates by bacteria—is a consequence of impaired gastric peristalsis, and occurs as a result of chronic inflammatory process involving the various layers of the gastric wall, but particularly the muscular layer. A very large experience teaches me that in the great majority of cases of chronic gastritis the peristalsis is not impaired. Figures and statistics are not absolutely reliable, but in 147 cases of chronic gastritis, in which attention was paid to this system, I found the peristalsis normal in 102; it was accelerated (hyper-peristalsis) in 18; slightly impaired at times, and varying with normal peristalsis at other times, in 16 cases; impaired peristalsis in 11. Boas (*Diagnostik u. Therapie der Magen Krankheiten*, p. 21) also expresses the opinion that primary chronic gastritis never, or but rarely (“nie oder hoechst selten”), causes advanced peristaltic weakness of the stomach, and that this organ is usually found empty in the morning, before breakfast, disregarding a variable amount of mucus and bile.

Fermentation, then, is not a necessary consequence of chronic gastritis, but a rare consequence of those results of chronic inflammation of

the stomach which lead to impairment of the peristalsis. These are atrophy of the muscular layer, which diminishes the driving force, or swelling of the mucosa with hyperplasia of the muscularis in the pyloric region, which causes an obstruction. All impairments of peristalsis in chronic gastritis may be classed under these two headings, viz., (1) loss of driving force, (2) obstruction.

The Treatment.—This should be directed toward restoring the impaired motor functions. When fermentation is marked as determined by the chemic test mentioned, nothing can take the place of lavage. The gastric spray is useless for this purpose. Spraying the mucosa may be of utility for reducing a hyperemia, or anesthetizing a localized erosion, but as an aid in cleansing or disinfecting the stomach it is a delusion. Intra-gastric electricity is useful, in my experience, in restoring the lost muscular tonicity. I do not profess to be able to explain how this good effect is brought about. The polemic on this subject which has developed between Meltzer and Einhorn is more of theoretic than practical interest. (See Hemmeter's "Diseases of the Stomach," second edition, p. 201.) Clinical experience teaches that the faradic current is best in the treatment of impaired peristalsis, and the galvanic current more useful in allaying gastric pains. Where peristalsis alone is impaired, I use a strong faradic current of high tension, the positive pole within the stomach and the negative alternately in the epigastrium and over the spine. I have already called attention to the fact that the rapid interrupter is not especially useful in producing contractions of unstriated muscular fiber ("Diseases of the Stomach," second edition, etc.). The mucosa of the stomach is practically a non-conductor. It is possible to send so many stimulations into a muscle in a second, that it will not contract at all, whereas it will contract if the number of stimulations to the second are reduced. I find the best results are obtained by a faradic current equal to that of one Grove cell freshly prepared, sending four stimulations into the stomach per second, or 240 per minute. Great variation exists in the tension and volume of various cells used for medical purposes. It is very desirable that practitioners should by common consensus agree to some standard unit of cell construction to be used for therapeutic purposes. There is more reason in using electricity in indefinite quantities, or referring to it in therapy by variable terms, than in employing the stronger drugs and chemicals and referring to them in indefinite and variable terms.

Antiseptic Drugs.—The antiseptic drugs have been extensively tried by me in private and hospital practice, and I have discarded them. They do more harm than good. It is humiliating to see that the profession still allows itself to be duped by the incredible claims of large financial

concerns extolling new antiseptics for the gastrointestinal tract. Lavage is the best antiseptic which we have for gastric fermentation.

Diet.—Where the gastric peristalsis is impaired, there is no diet in the gamut of human foods which will agree well with the patient unless this peristalsis is restored. If the motor function of the stomach cannot be restored by lavage, electricity, intragastric douching and strychnin, surgical means may have to be resorted to. The removal of a hyperplastic pylorus has, in my experience, brought every sign of gastric fermentation to an end as soon as the operation was recovered from. If the driving force is destroyed by atrophy of the muscularis, gastrorrhaphy or gastroplication is sometimes able to restore the motor function. The diet question, therefore, in gastric fermentation, is not so much a question of what kind of food to give, but how to make the stomach contract and empty its contents into the duodenum.

As fermentation is a decomposition of the carbohydrates, however, it is well to exclude them from the diet entirely, for a time, and to nourish the patient exclusively by proteid food in a finely divided state (scraped beef, Hamburg steak, sweetbreads, fish, calves' brain, egg albumen, gelatins). All food should be so served that it requires very little chewing. If there is an absence of free HCl after test-meals, this should be supplied in gelatin capsules during and after meals. (See Hemmeter, "The Logic of Hydrochloric Acid Therapy," etc., etc., *American Medicine*, April, 1901.) Gastric fermentation occurring in the course of dilatation for carcinoma calls for methodic treatment directly toward the underlying cause. It is well to hold in our minds a few exact etiologic factors of fermentation, to have clear-cut and incisive knowledge concerning the possibilities of therapeutics. This will prevent us from doing harm at least, especially from giving antiseptics concerning which we have no reliable evidence that they can check or control the fermentative process without other therapeutic aids.

International Medical Magazine. The Trio.

Late Views upon the Etiology and Infective Period of Some Infectious Diseases.

Abstract of an article by Herbert Clark Emerson, of Springfield, Mass., in *Yale Med. Jour.*

MEASLES—The infective agent, believed to be bacterial, has not been isolated. The infection resides in the secretion from the throat, in the exfoliated epidermis and probably in discharges from the bowels. The infective period begins early in the disease, even in the prodromal stage, extends throughout the duration of the illness and until all cough and desquamation have ceased. Usually the period lasts from three to

four weeks, and longer, if there be pneumonia present or aural or nasal complications.

WHOOPIING COUGH—The specific micro-organism is not yet agreed upon, though the weight of opinion points to the bacillus first described by Koplis in 1897. There is reason to believe that the special poison of the disease may linger about clothing and furniture for some time. The infective period extends from the very earliest symptoms until whoop and cough have disappeared. No time limit can be set. A French observer who believed that the disease was not contagious after the establishment of the whooping stage, allowed more than a hundred children who had not previously had the disease to mingle with children, all of whom were in the whooping stage, for a period of about twenty days and only one of the exposed contracted the disease.

INFLUENZA—Is caused by a nonmotile bacillus discovered by Pfeiffer in 1892, and found in the sputum, nasal and pharyngeal secretions of persons affected with the disease. The infective period extends throughout the disease.

The special points emphasized regarding the foregoing disease are (1) the late period in which the infection may still exist and be disseminated; (2) the care that should be taken to prevent contact between the infected and the noninfected, particularly among young children and aged people; (3) the thorough disinfection of personal articles and all objects handled by the sick.

TUBERCULOSIS—Caused by the tubercle bacillus discovered by Koch in 1882. Infection occurs chiefly through the respiratory tract from the inhalation of dust containing the dried organism. The infective period cannot be stated in measures of time. The disease may be transmitted direct, as from lips to lips, or by soiling the hands with sputum or contaminated clothing and the use of the same eating and drinking utensils. Too much stress cannot be laid on the importance of explaining to patients the manner in which the disease may be disseminated and instructing them how to avoid its spread.

SCARLET FEVER—Micro-organisms have been found in this disease since 1885, and latterly a Chicago investigator has described a diplococcus as the causal germ, two or three other observers agreeing with him, but the real infective agent is far from proved. All agree that the contagium may be found in the desquamating skin.

There is no doubt that a streptococcus plays a most important part in the general infection and complication of this disease; but the evidence is that this streptococcus is identical with the streptococcus pyogenes, and its presence is due to secondary infection. Special methods of microscopic and biologic work are probably necessary to demonstrate the true scarlet fever contagium, which is at present unknown.

The contagium exists in the secretions of the throat and mouth which renders the disease highly contagious in the early eruptive period. Whatever the infecting agent is, it is certainly very tenacious of life, and may cling to clothing and furniture for long periods of time and maintain its ability to produce the disease. The contagium may be carried through the agency of a third person. Thorough disinfection should be used after the recovery of a scarlet fever patient.

TYPHOID FEVER—IN 1880, the true cause of typhoid fever was found to be a bacillus which was demonstrated in the spleen and diseased organs of the intestines of patients suffering from this disease. These bacilli are actively motile organisms, not destroyed by exposure to cold, but easily killed by a ten minutes' exposure to a temperature of 60 degrees C. They are found in the discharges from the bowels, in the urine, in the rose spots, and sometimes in the body secretions like the sputum and sweat. The disease is not contagious and the only channel of infection is by way of the alimentary tract, i. e., by actually swallowing materials that have come directly or indirectly from the bowels or bladder. Milk, water, and vegetables like celery, are the most common carriers of the infection.

So long as there are typhoid bacilli in any of the discharges, so long is the patient a possible source of infection. This period extends from the beginning of the illness until recovery is completely established and often for weeks after this time. The bacilli usually disappear from the feces early in the course of the disease, but appear late in the urine and remain for a considerable length of time after the patient is well. This infectiousness of the urine of postconvalescent cases should be made clear to patients as well as the danger of spreading infection by this means. Nurses and persons who are in attendance upon typhoid fever patients, should be carefully instructed to wash their hands frequently, as the fingers are constantly liable to become contaminated with the discharges. It happens occasionally, too, that the person charged with washing soiled clothing have infected themselves and later experienced the usual course of the fever. The Widal reaction is rarely seen before the fourth day of the disease, usually on the seventh or eighth day, and is considered a valuable means of diagnosis in doubtful cases.

DIPHTHERIA—Due to the Klebs-Loeffler bacillus discovered in 1883 and 1884. The organism is chiefly found in the local lesion, rarely in the blood or internal organs. The author has, however, found them in the discharge from the middle ear, in an abscess on the arm and in a similar sore on the great toe. The symptoms are due to the toxin produced by the germs and not to the germs themselves.

There is no infectious disease whose infective period can be so defi-

nitely ascertained as that of diphtheria. As long as the diphtheria bacilli are present in the nose or throat, as the case may be, the patient is a source of infection to others, in spite of the normal appearance of the mucous membrane. Diphtheria is literally a disease that is handed about—all children, sick or well, are continually putting their fingers in their mouths, and in case of diphtheria they consequently infect the next objects handled. It is now a matter of common knowledge that the diphtheria bacilli remain in the throat, for instance, for an indefinite period after the membrane has disappeared, and it has been repeatedly proved that these bacilli still retain their original virulence for weeks. So great a source of danger are these convalescent cases considered to be that the Boards of Health of most cities have ruled that quarantine must be maintained until bacteriologic examinations show that the germs of the disease have left the affected surfaces.

He considers the primary sources of infection of diphtheria most to be dreaded are the mild, unrecognized cases that are not isolated, and the patients recovered from diphtheria, but going about carrying the bacilli of the disease still in their persons,—*The Trio*

TEST FOR OLEOMARGARIN.

C. L. Parsons gives the following simple method for distinguishing between butter and oleomargarin. Half fill a 100 c. c. breaker glass with sweet milk, heat nearly to the boiling point, introduce 5 to 10 grams of the sample to be tested, and stir with a narrow wooden spatula until the fat is liquified. Now place the vessel into cold water and continue stirring until the fat has reached the temperature where it begins to solidify. At this point butterine may readily be formed into a solid lump, while pure butter will only become granular. At the moment of congealing stirring must be continuous. The presence of butter to the extent of 25 per cent does not interfere with the above behavior of oleomargarin.—*Jour. Amer. Chem. Soc.*

ANTIDOTE FOR FORMALDEHYDE.

Merck's Archives says that ammonia is a reliable antidote for formaldehyde. It may be given as ammonia water, a few drops well diluted, or in the form of the aromatic spirit, or as a solution of ammonium acetate.

The Plague Bacillus.

M. J. Rosenau, Director of the Hygienic Laboratory, Marine Hospital Service, has made a careful study of the plague. In his last report, the following conclusions are drawn:

1. The *Bacillus pestis* is not a frail organism, it resembles the hemorrhagic septicemic group, or the cocco-bacilli as far as its viability is concerned.

2. Temperature is the most important factor in the viability of the plague bacilli. It keeps alive in the cold under 19° C., a very long time. It dies quickly, especially when dried, at the body temperature, 37° C.

3. Moisture favors the life of the *Bacillus pestis*. It usually dies in a few days when dry, even in the presence of albuminous matter, provided the temperature is above 30° C. It may keep alive and virulent when dry for months in the cold, under 19° C.

4. A sunlight kills the organism within a few hours, provided the sun shines directly upon the organism and the temperature in the sun is over 30° C. The effect of sunlight is not very penetrating.

5. The virulence of the *Bacillus pestis* is often lost before its vegetability.

6. It is unlikely that new dry merchandise would carry the infection. The organism usually dies in a few days on the surface of such subjects as wood, sawdust, bone, paper, etc.

7. Clothing and bedding can harbor the infection for a long time and may act as fomites. The bacillus lives for months, when dry, in albuminous media at temperatures under 20° C.

8. Food products may carry the infection of plague. The bacillus lives a long time in milk, cheese and butter. It usually dies quickly on the surface of fruits and prepared foods.

9. The organism may live a long time in water, although plague is not a water-borne disease.

10. The plague bacillus does not live long on paper, and first-class mail is not apt to convey the infection.

11. The colder the climate the greater the danger of conveying the infection on fomites—clothing, bedding, food, merchandise, etc.—and more extensive disinfection is required in such a climate in combating the disease than in tropical regions.

12. The plague bacillus is destroyed by sulphur fumigation and by formaldehyde gas in the strengths in which these disinfectants are usually employed. The gases can only be depended upon as surface disinfectants. In disinfecting ships, warehouses, dwellings, and other places infected with rats, fleas, and vermin, sulphur is better than formaldehyde, because formaldehyde gas fails to kill the higher forms of animal life.

13. A temperature of 70° C. continued a short time is invariably fatal for the plague bacillus. The ordinary antiseptics are all efficacious in their usual strength for non-sporebearing organisms. Efficient surface-disinfection may be accomplished by exposing objects all day to the direct sunshine on warm days. The temperature in the sun must be above 30° C.

MINNEAPOLIS HOMŒOPATHIC 'MAGAZINE.

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EDITORIAL.

Minnesota State Society.

The thirty-sixth annual session of this society has come and gone. The program was a good one, as evidenced by the words of Dr. H. C. Allen, of Chicago, the editor of the *Medical Advance*, who said, during the meeting, in congratulating the society on its successful effort: "In my editorial capacity I have received many programs of homœopathic societies this year, and I must say this is the best of all, and your secretary is to be congratulated on the results of his labors. This program does not need to be labeled homœopathic."

The sessions were well attended, there being more than twice the usual number on the first day, and the interest and attendance never flagged throughout the session.

The bureaus of homœopathy and materia medica brought out many papers and interesting discussions, and the evening session on the first day was a bright point of the program committee. The presence of Dr. H. C. Allen, of Chicago, that wheel horse of materia medica, added greatly to the interest and enjoyment of the occasion, owing to his many dissertations upon the various drugs discussed and his thoughts upon the Hahnemannian doctrines which he so ably expounded.

The second day brought, in the afternoon, Dr. C. S. Neiswanger, of Chicago, the head of the Illinois School of Electro-Therapeutics, whose practical conversational address or remarks upon the various forms of electricity and their therapeutic administration, including the x-ray, was listened to by a large audience, perhaps the largest audience of the meeting, whose mental enjoyment would have been complete had it not been for the ungentlemanly whispering and talking of one or two.

The local committee of arrangements had outdone all efforts of previous committees, and over one hundred members, wives and guests sat down to a very enjoyable banquet, which was brought to a most pleasing termination by the toasts and responses thereto under the direction of that prince of toast-masters and royal good fellows, Dr. Joseph Davidson Lewis, of St. Paul.

The scintillations of Lewis' wit; the jolly "con talk" of Comstock; the lugubriousness of Ricker, who sees "mountains" in "mole hills"; the "nightmares" of O. H. Hall, including the perennial "cheese story;" the "day dreams" of Paul A. Higbee, together with the Perry-gorical remarks of the member from Farmington, brought to a close one of the most enjoyable social evenings that the Institute has produced in many years.

The character of the work done, not only by the individual members, but by the bureau chairmen, was noticeable, and President Lufkin publicly congratulated Chairman Comstock of the Bureau of Pathology for the excellence of his bureau program.

Altogether this year's session has been far and away in advance of anything in recent years, not only in attendance, but in scientific work.

The officers elected for the ensuing year were: President, O. K. Richardson, of Minneapolis, one of the hard working younger members of the Institute, whose ability is thus recognized. The vice-presidents are Drs. A. E. Comstock, of St. Paul, and Geo. P. Connolly, of Rockford. The secretary and treasurer seem to be perennials, and are as a consequence always blooming, they being re-elected without opposition, the members of the Institute evidently recognizing good things when they see them.

No new legislation was attempted. Resolutions of sympathy with Dr. W. H. Caine, of Minneapolis, in his affliction and long continued illness, were adopted, as also were resolutions of condolence to the family of the late Dr. Wm. Tod Helmuth, of New York City, who died May 15th at his home, New York City, of angina pectoris.

At the request of the faculty of the College of Homœopathic Medicine and Surgery of the University of Minnesota, President Lufkin appointed an advisory committee from the Institute to the faculty. The

committee is composed of Drs. A. J. Hammond, Winnebago City, one year; T. W. Ashley, River Falls, Wisconsin, two years, and A. B. Cole, Fergus Falls, for three years.

The meeting room of the Institute was handsomely decorated with flags, palms, cut flowers and portraits of Hahnemann, Hering, and other eminent members of the homœopathic school. The following are the bureau chairmen for 1903:

- Obstetrics—J. T. Schlesselman, Good Thunder.
- Homœopathy—Francis Peake, Alexandria.
- Materia Medica—Annah Hurd, Minneapolis.
- Pediatrics—F. C. Spates, St. Paul.
- Clinical Medicine—M. W. Smith, Red Wing.
- Diseases Eye, Ear, Nose and Throat—J. D. Lewis, St. Paul.
- Medical Jurisprudence—R. B. Leach, St. Paul.
- Electro-Therapy—Margaret Koch, Minneapolis.
- Mental and Nervous Diseases—Edwyn Wayte, Herman.
- Skin and Venereal Diseases—Wm. B. Roberts, Minneapolis.
- Sanitary Science—H. A. Bingham, Minneapolis.
- Pathology—H. M. Lufkin, St. Paul.
- Surgery—H. C. Aldrich, Minneapolis.
- Gynecology—R. St. J. Perry, Farmington.

NEWS AND NOTES.

The Minneapolis Homœopathic Medical Society meets on the second Wednesday eve of each month; Henry C. Aldrich, M. D., President; Adele S. Hutchison, M. D., Vice-President; O. K. Richardson, M. D., Secretary.

The State Medical Examining Board holds its examinations at the State Capital building in St. Paul, the first Tuesday in January, April, June and October. C. J. Ringnell, M. D., Minneapolis, Secretary. The homœopathic members are Adele S. Hutchison, M. D., Minneapolis; Thos. Lowe, M. D., Slayton and A. B. Cole, M. D., Fergus Falls.

Dr. A. P. Williamson was east during the fore part of May, in attendance at the dinner given to Dr. Selden H. Talcott at New York, commemorating his twenty-five years' service at the head of the Middletown, N. Y., Insane Hospital; and also the alumni reunion at Hahnemann College, of which organization he was president. He has promised a write-up of both gatherings.

Dr. F. L. Beckley, of Merriam Park, was married to Miss Myrtle Dwelle, of Lake City, Minn., at the latter place, on May 21st. Congratulations are hereby extended.

Hahnemann of Philadelphia.

The commencement exercises of Hahnemann Medical College of Philadelphia occurred on Thursday evening, May 15th. Sixty-eight graduated.

After the exercises the alumni met at their annual banquet at Horticultural Hall. Over three hundred alumni sat down to the feast.

After doing full justice to viands provided, speeches were in order. Prof. H. L. Northrop, of '89, was the toastmaster. He proved to be an ideal. His remarks were all exceedingly appropriate and bubbling over with real wit.

The first toast on the program was "The Alumni." This was responded to by the president of the Alumni Association, Dr. A. P. Williamson, '76, of this city. The doctor's theme was "The Loyal Alumnus."

Prof. J. E. James, '86, responded for "The Faculty."

Dr. J. W. LeSeur, '86, of Batavia, N. Y., next replied for the "York State Folks."

"The Class of 1902" was represented by its president, Dr. Julian Adair. The doctor's remarks produced considerable merriment, as he portrayed the personal weaknesses and peculiarities of certain members of the faculty.

One of the pleasantest features of the occasion was the singing by the class of 1902. The class also showed their appreciation of certain parts of the various speakers' remarks by giving the college yell.

The Dinner to Dr. S. H. Talcott.

On Wednesday, May 14th, a most interesting function occurred at the Waldorf-Astoria in New York.

The professional friends of Dr. Selden H. Talcott celebrated his twenty-fifth anniversary as superintendent of the Middletown State Homœopathic Hospital for the Insane, by presenting him with a beautifully designed loving cup, the work of Tiffany & Co.

One hundred and thirty prominent members of the medical profession sat down to the banquet, which was as fine as the celebrated hostelry could produce. While perhaps the residents of New York and its vicinity preponderated in numbers, there were present many representatives of the East, West and South.

After proper attention had been paid the goodly feast, post prandial exercises were in order.

The versatile, accomplished and popular physician, Dr. Clarence W. Butler, of Montclair, presided as toastmaster, whose ready wit added greatly to the occasion. The first toast was "The Early Days at the Middletown Hospital." This was responded to by Dr. A. P. Williamson, of this city, who served with Dr. Talcott at the hospital for ten years, and was therefore enabled to speak of the hospital as it appeared in its early days.

Then followed, "Dr. Talcott's Quarter of a Century as a Physician and Writer." Dr. John E. Wilson, of New York, responded. The doctor's remarks were exceedingly eloquent and evidenced the fact that the medical cloth can upon occasion rise to a high order of oratory.

Dr. A. E. Macdonald, superintendent of the Manhattan State Hospital for the Insane, a friend of many years, was called upon, and responded in a very felicitous vein.

Mr. J. W. Slauson, of Middletown, one of the late board of trustees, which was recently legislated out of office, replied to the toast, "Dr. Talcott's Quarter of a Century as Superintendent." Mr. Slauson traced the doctor's career very fully and paid a glowing tribute to him as a man, a citizen and a friend.

Dr. N. Emmons Paine, of West Newton, Mass., then presented the doctor with a handsomely bound volume of letters from many friends in all parts of the country, congratulating him on his quarter of a century of service. The loving cup was to have been presented by Dr. Wm. Tod Helmuth, but who was too ill to be present.

Dr. George W. Roberts, of New York, read the poem which Dr. Helmuth had written for the occasion.

The last speech was made by the guest of the evening, Dr. Talcott, whose response was touching and exceedingly beautiful.

The occasion was very enjoyable.

American Institute of Homoeopathy.

Office of the President, Cleveland, O., May 20, 1902.

To the Members of the American Institute of Homœopathy:

All arrangements for the fifty-eighth annual meeting of our national organization, to be held in this city, June 17th to 21st, are now complete. Present indications fully justify the assurance that in the matter of attendance, in its interest, and in its special features, it will greatly excel any previous meeting in the history of the Institute.

Cleveland is a summer city. In our week in June it will be at its best. It promises cool nights and pleasant days, while its shaded streets, its beautiful park system—which is Cleveland's especial pride—and its water front, all combine to make it attractive to the visitor and refreshing to those who will next month enjoy its hospitality.

The spontaneous response that the special feature—the College Alumni Conclave—has brought forth, of itself guarantees a large attendance and an intense interest. It is thought that this occasion will do much to create increased interest on the part of each alumnus in his own alma-mater.

Members of the profession should realize that the present is a critical period in our history. Events of great importance are at hand. In the law-making bodies of many states radical legislation is about to be attempted vitally affecting our interests as a school. The Institute is the most powerful guardian of your rights. Never before was a strong organization so important. Each one must do his part. Come and lend your aid.

The various social functions that have been provided by the local profession, while adding much to the enjoyment of the visiting members, will in no wise interfere with the serious work of the Institute. They are all planned to take place outside of the hours devoted to the business and scientific sessions. They will consist of the conclave, a reception and dance, of drives and trolley-rides, while there will be rare opportunity to indulge in golf and wheeling.

The Chamber of Commerce building, in which the sessions will be held, is unusually well adapted to our purposes. The Hollenden Hotel, which will be Institute headquarters, is a first-class house, and the entertainment will be of the best. But, in addition to this, there are many other hotels, of all grades and prices. Cleveland is very easy of access from all parts of the country, and the Committee on Transportation has arranged for a fare of one and one-third for the round-trip, from all railroad centers east of the Rocky Mountains.

On the part of the profession and the citizens of Cleveland a hearty welcome awaits all who may come.

JAMES C. WOOD, M. D., *President*.

CH. GACHELL, M. D., *Secretary*.

To the Members of the Profession:

Any member of the profession desiring to procure an application blank for membership in the American Institute of Homœopathy will have one sent to him by return mail on receipt of a postal card request. Blanks will be sent with the Annual Circular, but they can be procured in the above manner at any time. Fraternally,

CH. GACHELL,

100 State St., Chicago.

On May 14, at Plain City, Ohio, occurred the wedding of Miss Hester Snyder, of that city, and Dr. Levi Hall, of Minneapolis. The many friends of the doctor, both lay and professional, will join us in extending congratulations.

Dr. W. A. Reed has removed from Beloit, Wis., to 86 W. 83d St., New York City.

Dr. A. M. Linn, of Des Moines, has been reappointed chairman of the Iowa Board of Health.

Practice with Equipment for sale.

Good location; town of 600; no opposition. Address A. M. Crandall, M. D., Hokah, Minn.

The Iowa Board of Medical Examiners, under a new law, now issues licenses to osteopaths who are graduates of accredited osteopathic schools.

Dr. F. A. Gowdy has removed from Granger to Harmony, Minn.

Dr. S. P. Meredith, formerly of Spring Valley, Minn., is now located at Grand Meadow, Minn.

Dr. Lee, of Rochester, N. Y., has issued a second annual report of his private hospital, which shows the wonderful work the institution and Dr. Lee have done the past year.

At the Middletown, N. Y., State Hospital for the Insane, since April, 1874, there have been admitted 3,000 men and 2,982 women, a total of 5,982. Of these, 1,032 men and 1,152 women, a total of 2,194, have been discharged cured; 678 men and 443 women, a total of 1,121, have died; 324 men and 381 women, a total of 705, have been discharged unimproved. The percentage of recoveries on the whole number discharged is 46.45. The percentage of recoveries on the whole number admitted is 36.67. Number now in hospital, 1,278.

San Antonio, Texas, is to have a new hospital, in which all schools are to be represented, and Dr. M. J. Bliem is a member of the board of directors and chairman of the charter committee.

Hahnemann College, Chicago, will discontinue its continuous performance efforts, the three terms a year not proving satisfactory.

Dr. Ralph St. J. Perry, Farmington, Minn., has been elected to the chair of skin and venereal diseases in the College of Homœopathic Medicine and Surgery, medical department of the University of Minnesota.

The homœopathic college of Michigan's University at Ann Arbor, according to the *Medical Century*, has had come to it from the allopathic college some thirty-nine students during the past six years, and has lost but five students to the allopaths.

Dr. Bushrod W. James, of Philadelphia, has recently issued a report of the various Masonic Veterans' Associations of the United States.

Dr. L. D. Shipman is mayor of Canton, Minn.

Dr. D. W. C. Fowler, Aberdeen, So. Dak., has recently gone to Chicago to be operated on by Dr. J. B. Murphy.

Dr. Thos. Lowe, of Slayton, was recently in the city on his return from a trip to Duluth on business connected with the Modern Woodmen of America, for which order he is head physician.

A new law in Australia prohibits graduates of American medical schools practicing in that country.

Dr. M. J. Bleim, of San Antonio, Texas, is treasurer of the board of trustees of the new Carnegie library of that city.

Dr. E. H. Pratt, who recently returned from a professional trip to California, held a successful post graduate class in orificial surgery at the Chicago Homœopathic College during the week of April 28th.

It is reported that Profs. White, Weirick, Gatchell, Kippax, Gros-

venor, Thompson and Thomas have resigned from the faculty of the Chicago Homœopathic College.

Dr. Horace M. Paine, and wife, of Atlanta, Ga., celebrated their golden wedding recently at the home of their son, N. Emmons Paine, of West Newton, Mass.

Dr. Wilson A. Smith, Morgan Park, Ills., editor of the *Medical Visitor*, is arranging for a personally conducted party for the Institute at Cleveland in June. Write and make arrangements to go with him, for both he and his parties are all right.

Dr. A. J. Hammond, of Winnebago City, was a recent Twin City visitor, and we acknowledge a call.

Dr. Chas. M. Thomas, professor of ophthalmology in Hahnemann College, Philadelphia, recently successfully grafted new eyelids on to a patient whose face had been severely burned.

Dr. Martha G. Ripley visited the Pacific coast recently.

Dr. Wesley G. Matchan and Miss Boucher, of Bismarck, No. Dak., were married about May 1st, and while visiting the doctor's relatives at Zumbrota, Minn., she unfortunately contracted diphtheria.

Dr. E. Weldon Young, of Seattle, Wash., has been in Honolulu recently.

A little son of Dr. F. S. Barnard, of Los Angeles, California, formerly of Minneapolis, was badly burned by lime recently.

Dr. S. M. Spaulding, of Los Angeles, California, formerly of Minneapolis, was seriously injured on April 16th by being thrown from an electric car which he attempted to board while it was in motion, two ribs being broken and the ligaments of his left knee badly torn. In addition he received severe internal injuries, so we learn from the *Pacific Coast Journal of Homœopathy*. The many friends of Dr. Spaulding in Minneapolis, where he was so long and well known, will extend to him their greatest sympathy.

The clever article by Dr. C. E. Henry, of Minneapolis, on Osteopathy, which appeared in the April issue of the MAGAZINE, has received much favorable comment. We expect to have several other articles on osteopathic topics by the same writer soon.

Dr. Byron E. Miller, Portland, Ore., is secretary of the State Board of Medical Examiners.

Dr. J. T. Leland and wife, of Tintah, Minn., are rejoicing over the recent advent of a son.

Dr. A. H. Christensen has located at Luverne, Minn.

Dr. E. D. Strong reports business good at Bradley, S. D.

Dr. G. G. Balcom, of Lake Wilson, Minn., is convalescing from a severe double pneumonia, which is good news to his many friends.

Dr. W. H. Caine, of Minneapolis, has been confined to his bed for the past five months with neuritis. Under the skilled care of Dr. A. P. Williamson we look for a speedy return to health.

Pulte College graduated a class of eleven on May 6th.

The Chicago Homœopathic College graduated a class of thirty-six on April 22d.

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Are all Cures made by Suggestion?. An Answer in the Affirmative.

E. H. PRATT, M. D.,

CHICAGO,

Prof. Surgery Chicago Homœopathic Medical College.

There is a difference between discussion and debate. Discussion calls out the pros and cons of a subject for proper estimation, and leads to correct conclusions, but debate is a mere intellectual tussle for supremacy, regardless of truth and justice. For this reason, among truth-seekers, discussion is always in order, but debate, never. May I hope for discussion and be spared argumentative comment, for the ambition of the present paper is to be merely a thought-breeder and by no means a source of dispute and discord.

That there may be no misunderstanding between us, let us consider briefly a few self-evident facts. Conclusions are always safe when the reasoning has been logical, provided always that the premises are correct, and the basic facts, therefore, of any proposition should always be reliable. Mistakes either of omission or commission will gladly be corrected, if attention is drawn to them, and no personal favor or consideration is solicited or desired, as the truth, the whole truth and nothing but the truth is alone worthy of our consideration.

When a soul, a spiritual body, a life principle or whatever you choose to call it, has abandoned its house of time, a human corpse remains. A careful dissection will demonstrate skin, connective tissue, bones, muscles, arteries, veins, capillaries, lymphatics, nerves and organs all in their normal states and relations, allowing, of course, for anomalies and pathological happenings, unimportant in the present consideration. Indeed, everything written down in the standard anatomies can be readily demonstrated in an unmolested state, for anatomies do not describe a man, but simply the house he lived in.

Now, a corpse has eyes and ears, nose and throat and skin surface

1. Presidential address before Illinois Homœopathic Medical Society.

as completely developed and adjusted as can be found in the living person and yet all its senses are hopelessly silent. Everybody knows it is perfectly useless to make an appeal to any of them. In the corpse no sound will reach the ears, no light the eyes, no odor the nostrils, no flavor the taste, no sensation will affect the sensitive surfaces. The brain, with its mass of cells, is all in order, the nerves are unmolested, the whole body, in fact, is still organized for business—but business has stopped. The only way in which a corpse can be influenced is from the outside. In itself it is but a dead and senseless organization. Is not this well-known fact sufficient evidence that the material part of us is completely devoid of faculties; that a body does not see or hear or sense in any way, but simply serves as a medium for the transmission of outward sensations to an inner being who is the sole possessor of all the sensuous faculties?

I do not believe that anyone present will question the statement that all impressions which reach the man proper by way of his physical body, are accomplished by means of vibrations at different rates of speed. Vibrations at a certain speed appeal to the sense of touch. Vibrations at another rate of speed can be tasted. Vibrations at another rate of speed can be smelled; at still another speed can be heard and at still another rate of speed can be seen. Vibrations faster than the fastest referred to and slower than the slowest, cannot be sensed at all except by a heightened education of the senses, and this, of course, only to a very limited extent.

If one sings at a true pitch into a piano or other stringed instrument, the string corresponding to the vibration of the tone produced will echo an answer. All the other strings of the instrument will be silent. This, indeed, is the secret of Marconi's wonderful discovery of wireless telegraphy. The electrical instruments which communicate with each other are made responsive to the same vibratory rate.

How deeply this law underlies the operation of our various senses is scarcely appreciated in all its fullness and yet it is scientifically true down to the minutest detail of all the sensations that reach any human being by way of his body.

There is another scientific fact which should not be lost sight of and that is if you would remove from the consciousness of a human being every fact which has been contributed by his various senses, self-consciousness would be annihilated so far as this world is concerned, and all intellectual and emotional activities would cease for lack of material with which to occupy themselves; so the various faculties are constantly gathering facts for the mind to dwell upon and make use of in its great work of character building.

It is necessary that the store houses of memory should be amply supplied with material by all the avenues of sense perception that the mental faculties of abstraction, imagination, reason, judgment, mental taste, will and consciousness can be furnished with means essential not only for their exercise and growth, but for their very existence.

Now, this word "suggestion" is not a synonym for any of the faculties of the soul, and as it is more commonly made use of as a common word in ordinary interchange of thought, perhaps it may seem a little far-fetched to dress it up in a scientific garb and furnish it with an exact meaning that will entitle it to a place in the scientific vocabulary, and yet the word is used by many writers and speakers of the present day to such an extent that a system of therapeutics has seized the term for its purposes and what we know as "Suggestive Therapeutics" has been permitted to establish and advertise itself as a means of cure, perfectly unchallenged, so far as the appropriateness of the term is concerned.

Suggestive Therapeutics, however, is employed by different so-called scientists with different shades of meaning, some of them using the term interchangeably with telepathy, while others employ it solely to mean impressions conveyed by spoken words or other signs, thus, by appeals made to the ears or eyes.

My plea is for a still broader definition of this term, making it sufficiently comprehensive to include every possible means of communication between an individual and the rest of creation.

Everybody must admit that suggestion in any case can only take place by means of such vibrations reaching an individual from some outside source. Now, the rate of such vibrations could in nowise influence the fact of a received message being recognized as a suggestion. It might be slow enough to be transmitted by the sense of touch or fast enough to be transmitted by the sense of sight or of an intermediate rate of speed of such a pitch as to appeal to any of the intervening senses, or it might be too slow or too fast to be sensed at all and be received into consciousness as a registered and definite impression coming from an unsensed source. If I should ask any of you if you had ever received a suggestion from anything or anybody, you might say that you heard this or that, you saw this or that, you smelled this or that, you tasted this or that or you felt this or that and from the recorded memory, obtained this or that suggestion. The suggestion might have been of sufficient importance to move you to a definite course of action or so unimportant in your estimation as to be ignored, but it would make no difference by what faculty the suggestive vibration was conveyed to you or whether it reached you by the faculties at all or simply arrived in the way of an impression from an unsensed source; as soon

as it entered your consciousness it is proper to let it be registered as a suggestion. Suggestions of safety and suggestions of danger, suggestions of health and suggestions of disease, suggestions of activity and suggestions of indolence, suggestions of health and prosperity or sickness and adversity; suggestions of every type and description that sway the human soul and move it onward through its journey of life can be vibrated into human consciousness by any waves of motion that are not too rapid or too slow to exceed the compass of the family of strings in the great harp of life.

In our common experiences most of the suggestions of which we talk and to which we give cognizance are of such vibrations that they appeal either to our eyes or our sense of touch or some of the organs which are pitched to intermediate vibrations.

There is still another fact with which we are all familiar and which should, likewise, be borne in mind in this connection and that is that suggestion, and consequently its effect of being translated into some form of action, involves attention. Many an eye glares at objects which it does not see; many an ear catches vibrations which never seem to penetrate the consciousness of the individual and the same is true of the other senses; in other words, the interior harp of life must be tuned to the proper vibratory pitch in order that its strings may respond to the waves of vibrations that are constantly pouring into it through the avenue of the senses.

Have you not, all of you, tried to cure patients who succeeded in baffling your best efforts from sheer determination on their part not to get well? Any doctor makes but a poor success in his efforts to practice the healing art where his services are unwelcome and poorly appreciated. To be sure, cures are made upon infants, upon the delirious and the insane in numberless cases which seem to be exceptions to the rule, but if one takes into his calculations the double nature of the hidden part of our organization and recognizes the existence of both the conscious and the unconscious man in the organization of the human being, he realizes, also, that these two parts of one nature are often at variance with each other, the conscious part of us having notions of one kind which are not endorsed by the sentiment entertained by the subconscious part, and these few exceptions prove to be very easy of explanation. But when both the conscious and the unconscious parts of an individual are united in their opposition to impressions received from outside sources, exclusion of such impressions from registry as suggestions will be complete, and an appeal might as well be made to a dead as to a living being if it is so abstracted as to refuse its heed.

Sound, sight, taste, smell or the common sense of touch are each

of them capable of conveying messages to the life principle which are capable of producing identical effects regardless of the avenue of their transmission. A man may be frightened by any of his senses, tamed by any of his senses, cured by any of his senses or made sick by any of his senses. In every case some one of the senses receives the message and the message is recognized and transformed to a suggestion and it matters not by which sense this is accomplished. Some persons are perhaps more alive to the employment of one sense than another, but any sense that can carry its message safely to headquarters can be held responsible for whatever effect is produced. Delights of all kinds can be induced by eyes, ears, nose, palate or skin indiscriminately and so can distresses, and when disorder prevails the harmonious action of any or all the organs of the body called health, can be re-established by any sense that is capable of conveying an adequate health suggestion. As homeopaths, your most skillful suggestions are made with attenuated drugs. A musical doctor could produce vibrations which must necessarily be at the same pitch or tune as its concord to produce the same effect, by means of his voice or some musical instrument. A water doctor could accomplish the same purpose by his appeal with heat or cold to the nerves of common sensation. A surgeon could cut away an element of discord and by a careful readjustment of remaining healthful tissues could permit the harmonious vibrations of health to proceed to an unmolested re-establishment, and so on with all the various therapies, electro-therapy, hygienic-therapy and the rest of them.

This view of the manner in which cures are made is not an attack upon homeopathy or any other means of cure, but simply an explanation of the manner in which all cures are made and is but an effort to establish in friendly relationship all the various means of cure, as in many cases, one form of suggestion is not strong enough to prove completely effective.

The difference between a diamond and a piece of coal, both of which are carbon, is merely a difference of vibratory action between the molecules composing each substance. The difference between the various colors of the rainbow is also merely a difference in the rapidity of vibrations and the same is true of the various drugs which we are so frequently prescribing. There is no form of activity in drug or light or knife or water or sight or sound that is not entirely dependent upon certain rates of vibration and whether they are transformed into suggestions or not, and appeal to the human organism is merely a question of their being able to arouse corresponding vibrations in the individual to whom they are directed.

It takes two telephone instruments to convey a message, a transmitter and a receiver. In the practice of medicine, knives, drugs, water, electricity, manipulation and all other physical measures, as well as sights and sounds are the transmitters. The attention of the individual at a corresponding pitch to the remedy used, is the receiver, and if the receiver be out of tune, so that the vibration corresponding to the one transmitted cannot be aroused, no cure can be effected, and any avenue which can transmit the requisite vibrations to induce the creative suggestion will be able to effect the cure.

Now, a human body at any time, is merely a detailed crystallization of the interior life up to date. This is the life history written in bodily tissues as the story of the evolution of the world is told in its quarries. Physiognomists read it in the face, palmists read it in the hands, musicians read it in the voice, orificialists read it in the pelvis, dermatologists read it in the skin, while general doctors can tell a great deal by the pulse and the tongue. Thus can various bodily historians from their different standpoints, read the story of a life in its bodily output.

To those to whom this view of affairs may seem strange, let me suggest that they recall a fundamental fact known to all good doctors and to many laymen. A nursing mother, if deeply stirred by anger, jealousy, fear or other disorder-producing emotion, may so poison her milk as to sicken her nursing child. So well known is this fact that many practicing physicians when called to doctor a nursing child, direct their measures toward the correction of the condition of the mother, paying no direct attention to the child itself. Now, if mental and emotional states can pollute the quality of the milk, why not the quality of the saliva, and as one masticates his food whatever emotions of mind or heart have held sway and flavored the products of the salivary glands with their qualities, are mixed with the food, passed down the alimentary canal where the table of life is spread from which all the tissues draw their sustenance, and in this manner are thought and emotional states and conditions translated into tissue products. Care, worry, fretfulness and all types of disturbing things can thus find expression in the sickness of organs and tissues and nothing but some suggestion from word or medicine or water or knife that shall be able to vibrate the disordered mental and emotional states more into harmonious action will be able to restore the harmony of organic activity known as HEALTH.

Now, so long as we must admit that the body in itself has no life registrations, no sensations and is, consequently responsive to no appeals, but that the vital principle within, call it what you will, is all that

sees, hears or in any way senses, we may look for the causes of disease and their cure in vain unless we go directly to headquarters and interrogate the life principle itself and obtain the answer to the greatest question which concerns the welfare of mankind, viz.: How is it with the soul? Of what is it thinking, how is it feeling? Ears can hear only as they transmit sensory vibrations to the life realm; eyes can see after the same manner; smell, taste and touch can be translated into verities only as the vibrations which they carry are registered in the same hidden realm.

In the study of disease, therefore, let us not forget the study of man himself, for in his states and conditions only lie the issues of life and death in this world, to leave untouched the question of another.

The reason that drugs can cure is because they have a dynamic power of vibration which is powerful enough to penetrate into the sources of life, and no remedy of any kind is at all effective as a means of cure, unless it be transmitted, received and properly responded to in the deep recesses of our being where thought and feeling reign supreme.

This undulatory or suggestive theory of the manner in which all cures are made contains nothing that is derogatory to the employment of physical measures of any kind. No well informed person questions the wonderful cures accomplished by the prescribing of drugs, neither does a well informed person question the fact that equally wonderful cures are made by various other measures, which are also capable of instituting vibrations at a healthful rate, of sufficient intensity to arouse the individual to a healthful reaction.

But the various means of cure should not be jealous of one another, but work in harmony, supplementing one another as best they can for humanity's sake, and the present paper is submitted for your earnest consideration, as a rational explanation of the only manner in which cures are possible. In the light of the line of argument herewith presented, the conclusion seems inevitable that **ALL CURES ARE MADE BY SUGGESTION.**

As it is possible to learn the same truth from a good many sources, it is equally possible to make the same suggestion to a soul struggling for its light and life and peace and happiness, along any or all of the various avenues by which life is projected into its material crystallizations. When a soul is so preoccupied with some of its tendencies as to be abstracted and indifferent in other matters, it is frequently so profoundly self-hypnotized as to need energetic suggestions from various sources to re-establish its equilibrium and secure an appreciation of its distorted activities and the necessity of readjusting itself to a healthful

balance in order that its student life in the school of Time may be well rounded out. As therefore, the soul, which is but a mass of thoughts and feelings organized into individual form, is the part which is the source of the body, is the part which makes the body sick or well, it is, therefore, the part which cures the body and all that doctors of any type can do to aid in the restoration of the health is, by whatever means lie in their power, by whatever avenue they may be able to penetrate to the inner consciousness of the individual, make what suggestions they may be able to, being sure of one thing, that all cures which are effected by any means whatsoever, are accomplished by suggestions skilfully transmitted.

The Second Prescription.

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No doubt I shall repeat the experience of many a veteran when I assert that by far the most difficult task of the prescriber's art is the making of a second or subsequent prescription, in the conduct of a case. More blunders are made at this point, and more cases spoiled or remain uncured by untimely or incorrect selection of the second remedy, than occurs at the time of the first prescription.

How often has it happened, especially in the experience of beginners, that the first medicine administered produced a favorable impression, but when its action ceased, further medication seemed of little avail. It is that we may carefully consider the difficulties at this particular point and better understand Nature's law of cure may the more successfully apply those laws to the restoration of the sick, that this paper is presented.

The therapeutic attention of a case covered by this paper will be the time lying between the initial impression made by the first remedy administered and the demands of a second or new remedy. If the first prescription has been selected with care, having taken the case after the manner prescribed by Hahnemann, the drug impression made and developments awaited, very much will be gained by carefully studying the changes as they appear. As the kind and order of sequence of these developments will largely determine the time and selection of the second prescription, we do well to study this changing image most carefully.

In acute diseases relief is usually promptly afforded, hence no second remedy is needed, or if that be the case the change may be demanded in a few hours or days at most.

In chronic diseases, or those having a chronic miasm as its foundation, the changing picture will be much more slowly developed and require at times great patience and skillful handling. The danger is always that there will be too much haste and too much anxiety to be pouring in some medicine.

Give the remedy a chance to develop its best results before changing to another and another drug in one unending succession. It is a good rule, if not certain the case presents undoubted symptoms demanding a new remedy, to let it alone. Wait till next or subsequent days when the picture becomes clear and you are certain of your remedy. It is a most mischievous notion that calls for a constant or frequent repetition. The best results are not obtained in such manner. The conduct of a recent case of inflammatory rheumatism with previous endo-cordial trouble has abundantly established this statement to my own satisfaction. The idea of the slow but definite development of the force set in operation by a drug introduced into a living organism is one that is hard to grasp, yet must thoroughly possess us to be in accord with the operations of Nature, with whom we must continually reckon.

However, there is a vast difference between an aimless waiting and the man of a definite purpose. The last knows that the right remedy has been administered, that the results which follow are the action of the remedy and that he can well afford to wait the production of all that remedy will do. It may take a very long time to produce these completed results and for the indications of the new remedy to appear. But, however long, wait is the word while the first remedy is still acting. Do not spoil what may never be secured again. If the selected remedy be a deep acting one and well indicated and the recedence of symptoms typical, no other remedy will likely be needed to complete the case. At least it should be permitted a very long period of action without further interruption or repetition.

When fully satisfied that the impression made by the first prescription has become exhausted, be the time long or short, then comes the time to show the master hand. Ignorance or careless haste may easily spoil an otherwise brilliant cure and entail much needless suffering, or produce a condition of actual incurability. Hence the physician should possess himself positively of two facts.

First. Such a knowledge of the remedies prescribed and to be prescribed, with their respective action, that there shall be no guesswork.

Second. A conviction that the time has come to do one of two things—repeat the same remedy or select a new one. A study of the case must determine. If no new symptoms appear and only the original ones remain upon which the first prescription was based—modified by

the previous action of the remedy—then repeat the same remedy or in a higher potency. I prefer the latter as giving a deeper and more lasting effect. If already in a high potency, give several doses in water, at frequent intervals, until an impression is made. There are those who would select a lower potency, but I do not think the plan established by well authenticated results.

If, however, the physician finds on this second examination that a portion of the old symptoms are gone and that there are new ones not previously noticed by the patient, nor found in the written record, then the time has come to make a new prescription, exactly as at the first. However, if new symptoms are appearing and the case seems in a transition period, wait. Be not too hasty to prescribe while thus changing. In making the selection of this second remedy consideration should be had for the relationship existing between the selected remedy and the previous one, e. g.: This second remedy will likely be one closely related to the preceding or complimentary in its action, as bell. cal. carb., puls. and sil. ac. and sulp., etc. Many remedies will not follow each other and do good service.

Such relationship of drugs should be closely studied. The lists prepared are based on years of wise experience and are most valuable. Indeed, successful results cannot be reached without such knowledge, especially in chronic cases.

Boenninghausen and Hering both gave this subject very careful attention and we do well to imitate their example.

In our study thus far we have assumed the case a curable one and that the correct remedy was applied in a proper form and manner. What results would appear, however, if a correct selection of the remedy was not made? How would we be aware of such mistake? This is important information, for to wait further developments or to repeat the drug might inflict irremediable harm.

First, there will be no lifting of the mental depression and no diminution of the symptoms in an orderly manner, but they may rather increase in severity and attack more vital organs, changing from exterior to interior, etc.

Furthermore, there may be new symptoms appear, not previously noticed. Here is the place for a second prescription.

Frequently an antidote is given and the action of the wrong remedy checked. Hering gives a list of such antidotal remedies.

If the original symptom image, however, is still unimpaired, make a more careful selection and if satisfied give the remedy at once.

If, however, the original symptom image be seriously impaired, give an antidote and await developments. Considerable changes may

take place and some time elapse before Nature again brings out a clear cut symptom picture—it may be very faint or obscure and unreliable, but when reached prescribe on the new list of symptoms as at first.

Again, the action of the remedy may reveal the case an incurable one. If such case has been taken the prescriber is amply satisfied the similar remedy has been given he may so conclude, if there be quick, flashy results, soon dying out. Subsequent repetitions of the remedy produce less and less impression or none at all. The symptom image becomes faint and confused. Nature is weakening under the disease miasm and presents in clear cut symptoms. Only palliative results can be obtained. As the changing symptoms appear select the nearest remedy and await results. Be assured this is the best that can be done.

Such care and attention to the minute details of a single prescription may seem to the careless or routine prescriber as too large an expenditure of time and patience. That will depend on the estimate we place on the importance and dignity of the work demanding our attention. Success comes no other way.

Hahnemann wrote these words: "When we have to do with an art, whose end is the saving of human life, any neglect to make ourselves thoroughly masters of it, becomes a crime."

For the X-Ray, The Static Machine or The Coil?

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It is an attractive question for discussion, which is better therapeutically to generate the X-ray, the static machine or the coil? I have put the question to many X-ray operators in New York, Boston and Chicago. As a rule the answer is definite and decided in favor of one or the other, whichever apparatus the man happens to be using. It is something like discussing religion with ministers of various denominations, the one road to heaven being through the portals of their special churches. To an unprejudiced outsider it seems plausible that either apparatus is good therapeutically, provided it is operated skillfully. Dr. C. S. Neiswanger, president of the Illinois School of Electro-Therapeutics of Chicago, says it is the X-ray and not the apparatus which is the curative agent, and that either the coil or the static machine is satisfactory, provided that the fluoroscopic test of the strength of the ray is fulfilled. His test is that for treating external surfaces the penetration shall be such as to give definition of the bones as black shadows, but not sufficient to show the structure nor the articulation. For internal organs the penetration should be stronger, making the

bone tissue only a light gray, showing bone structure so that the cancellous tissue can be clearly defined and the articulations are distinct. He further states that in his opinion the static machine is less liable to cause dermatitis, the so-called X-rayburn, than the coil; and that the tubes are not exhausted as rapidly as by the coil.

Dr. Francis H. Williams of Boston, author of "The Therapeutics of the X-ray," uses the static machine. He had probably a larger number of X-ray cases and under better test conditions than any other man in the east. He has a large corp of assistants who attend to microscopical examinations, photographic and clerical records, etc. Dr. Charles W. Allen of New York city, whose newspaper interview in January in regard to report of cases read before a New York medical society made such a stir throughout the associated press, including the Minneapolis papers, uses the static machine to generate the X-ray. I saw a number of his cases and they were making remarkable progress.

Dr. Wm. J. Morton of New York city, who has probably the best technical knowledge of the physics of electricity of all the doctors in the east, and who has written a scholarly work called "The X-ray," had, at the time of my call upon him, twenty cancer cases under treatment. He uses the static machine exclusively, although he has coils in his office. Dr. Morton deserves credit for being the first physician in the United States to use the static machine. He brought one from France and it was at his instance that their manufacture was started in this country.

For radiography, the coil is preferred because it can generate such a very strong radiance and can be turned on and off by a single switch. It is a little more convenient to handle than the static machine, requiring a few less motions of the hand to start it. But in radiotherapy, where it is the general belief that the highest penetration is not required, better work being done by the softer ray, the static machine is preferred by many.

In my brief personal experience, I have used only the static machine, a Wagner mica plate, four revolving mica plates and four stationary glass ones. So far as my X-ray cases have compared with others treated by the coil, they do not bear out Dr. Grubbe's statement that it requires forty minutes' exposure on the static machine to accomplish the same results as are obtained on the coil in ten minutes. My patients have not been able to take more than a ten minutes' exposure without the development of dermatitis, and their improvement has been satisfactory. Published reports given by doctors using static machines, compared with those of doctors using the coil show about the same results attained under similar conditions of distance from the anode, quality of tube, frequency of sittings and time of exposure. All of which confirms the belief that the X-ray will cure whether generated by a coil or a static machine, provided the fluoroscope shows the proper degree of penetration.

Simplicity in Therapeutics.

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Stories may live by tradition, but therapeutics must be perpetuated upon facts. Individual experiences with drugs may vary, but they must admit of a reasonable verification to be of scientific value.

Taking these sentiments as the basis of a theme, we approach the subject of small doses with an explanation as to their use in therapeutics, with a degree of hesitancy, by reason of the criticisms that arise from prejudice and misunderstanding.

The small dose has not yet run the gauntlet of professional pre-judgment, but it has been championed by the people to such an extent, as to become a revolutionary agent in methods, and a positive contribution to therapeutics. We use this term with reference to the fractional, or the appreciative dose, with no regard for an infinitesimal standard.

The outgrowth of studying the effects of drugs upon the healthy body, has been the teaching of the elective affinity which all medicines seem to have for definite tissues.

Upon this subject the late Professor Stille has said, "Future investigations will throw light upon this obscure department which must hereafter furnish the surest basis for a science of therapeutics."

The word "specific" is used in reference to a medicine which antagonizes disease, as quinin for malarial plasmodium; but in a physiologic sense it refers to the elective relation which certain drugs bear to certain tissues, parts, or organs. Thus podophyllin has a specific affinity for the small intestines, chiefly for the duodenum, and attacks these parts from whatever source introduced. The active principle of cantharides passes into the blood, producing acute congestion of the kidneys and urinary passages. Colchicum irritates the stomach and intestines, whether swallowed, or injected into the veins. Likewise, colocynth influences the colon; aconite the vascular system; gelseminum the cerebrospinal centers; aloes the rectum; others selecting glands, or organs, according to their varied properties. Dr. H. C. Wood bases the eleventh edition of his "Therapeutics" upon physiologic study, while Cushney devotes a chapter to the special subject of affinity, with the comment that some cardiac poisons act only on the auricles, while others influence the ventricles.

Here, evidently, is a principle in therapeutics, supported by excellent authority, with very little evidence of its practical application in selecting

medicines according to their specific relations. Apparently, some drugs act only through chemic union, combining with protoplasm to alter the function of cells; others increase functional activity by a law of stimulation, depending upon the quantity administered.

It is in the prescribing of the latter, that the small dose is particularly applicable, and may be selected with a fair degree of therapeutic precision.

We hazard the opinion that when a special part or organ becomes inflamed or disturbed in function, the physiologically selected medicine acts as a stimulant to restore balance of forces, when given in small and frequently repeated doses; but irritates, congests, or paralyzes recuperative power, thereby aggravating the malady, when given in large doses at long intervals, precisely as alcohol influences the system under like administration.

It is well known that a full dose of alcohol paralyzes the cerebro-spinal centers; but if that same amount be administered in small doses at short intervals, instead of stupor, we obtain the highest degree of stimulation. Many medicines furnish the same evidence.

To illustrate: digitalis acts upon muscular fiber, causing slower relaxation, quicker contraction and is thus indicated in weak heart-action with low blood-pressure. Under such conditions 10 to 20 drops of the tincture may give excellent results; but more frequently the morbid action will not be corrected by this size dose. If, for convenience, we put the same quantity into 20 teaspoonfuls, or a half-glass of water, and give 1 or 2 teaspoonfuls every 1 or 2 hours (dose gtt. $\frac{1}{2}$ -2), the result will be better, and generally a slow, sustained action follows. The late Dr. Edward Mayer has written: "Small doses will steady the same heart that has been made to flutter under large ones."

Aconite influences the vascular system, and bryonia limits effusions of serous membranes. (Phillips.) In sickness characterized by fever, quick pulse, labored breathing, pleuritic pain and rusty sputa, 5 to 10 drops of these strong tinctures into 20 teaspoonfuls or a half glass of water, 1 or 2 teaspoonfuls given every hour or 2 hours (dose gtt. $\frac{1}{4}$ -1), constitutes an early treatment for pleurisy and pneumonia that has given results incredible to those who have been accustomed to large doses and severe antiphlogistic measures. This fact has been verified by years of experience and is no longer in the "primary stage of laudation."

Dr. Cooper writes: "In asthenic cases of pneumonia I rely on minute doses of aconite and bryonia, frequently repeated," and adds, "under this treatment we should not lose over 5 per cent of our cases." The probable explanation is that the small dose stimulates and equalizes, without interfering with the essential *vis medicatrix naturae*.

Belladonna determines blood to the capillary circulation with heat

and redness; *Rhus tox.* will, in addition, produce a vesicular eruption. If in erysipelas either of these medicines, depending upon the character of eruption, be given as above directed, the results are fewer deaths and quicker recoveries, *cæteris paribus*, than when tincture ferric chlorid is administered in unwelcome doses. We disclaim any estimate of the value of this medication; we only know that nature thus simply treated gives better results than when burdened by an irritating product, and in this particular instance we are supported by the testimony of Cushney, the Hotel Dieu (Paris), and the Royal Infirmary in Edinburgh.

Phytolacca is a specific irritant of the throat. It is physiologically indicated in follicular tonsilitis with fetor of the breath, and in small doses is a most positive remedy. *Jaborandi* produces diaphoresis, yet in small doses will check the sweating of tuberculosis.

Nitroglycerin causes congestive headaches with intense throbbing; when properly selected for morbid conditions of similar character, *gtt.* 1-1000 doses will give relief.

Apomorphin acts upon the medulla, produces convulsions, rapid breathing and great prostration. A small hypodermic dose will stimulate the spinal centers, relieve hysteria, stop the convulsions in childhood, and abort the pains of vasomotor disturbances.

Ipecac and *calomel*, both nauseants, correctly prescribed, will stop bilious vomiting. *Colocynth*, universally known as a purgative, will, in small doses, relieve diarrhea characterized by griping umbilical pain. (Hughes.)

Fractional doses of *podophyllin* relieve a form of diarrhea characterized by dark-colored movements, cutting pains and worse in the mornings. (Ringer.) Less than 1 drop doses of *cantharides* relieve the distress of cystitis and hematuria. (Mayer.)

Arsenic, in minute doses, is extolled in the coryzas of childhood and in the vomiting of drunkards. (Murrell.) *Potas. bichromate* in *gr.* 1-100 doses relieves hoarseness and aphonia. (Phillips.) *Calomel* in *gr.* 1-20 doses every hour relieves irritable stomach (Aulde), and every 2 hours is a clinical routine treatment for certain systematic dyscrasia. (Knapp.) *Strychnin arsenate*, in doses of 1-134 *gr.* every hour makes "the most permanent tonic stimulant." (Jackson.)

Malcolm Morris, of England, recommends the wine of antimony in drop doses as specific treatment for acute eczema.

These, with many similar facts, have long been known and admit of sufficient application to merit more general recognition. They must, however, be arrayed against other facts of a totally opposite character, and constitute no foundation for a belief in small doses only, or in the universality of a law of cure. There are many instances in which the

fibril cannot replace the lash; when to remove conditions, to antidote poisons and to eliminate disease, vital, chemic, and well-proven drugs are essential in the fullest doses.

The physiologic action of a drug may point the way to its therapeutic use. Every prescriber should know not only the pathology of disease and the antagonizing influence of medicines, but also their elective affinity for tissues of the healthy organism.

Whenever it is possible to apply the stimulating influence of the physiologically indicated dose, prescribing becomes ideal; relief is not wrought at the expense of other organs, as in the case when syrups are given for coughs, nor is the physician's mind tormented by a senseless, unreliable symptomatology.

To prescribe, in every instance, opiate astringents for diarrheas, many of which can be relieved by diet; morphin for certain abdominal pains that readily yield to dioscorea; or massive doses of bismuth for vomiting that can best be treated by a judicious application of heat; burdens the system unnecessarily and prostitutes therapeutic measures.

The single remedy hygienically given, in whatever dose, not only simplifies prescribing, but is scientifically correct. Polypharmacy is largely the result of physicians writing their own histories and never taking their own medicines.

Dr. Hare has made a strong argument against the irrationality of this method of combining many drugs, whose action is little understood, and putting them into bodies of which we know less.

The experience of those treated by other systems makes the strongest argument. All believe that if there be no good in "infinitesimals," there is at least directly no harm.

"Yet," says Dr. Osler, in his review of the nineteenth century medicine, "nobody has ever claimed that the mortality among homeopathic practitioners was greater than among those of the regular school," an observation well substantiated by statistics. But a more significant fact is observed in the psychic method of cure in which faith is the great lever. Faith, from childhood to age, is more or less a panacea for human ills, and, however reposed, should never be rudely shaken. Whether it be in prayer or in the plainest doctor, it is the same precious commodity without which we can do nothing, and with which we, too, can work wonders.

To see a large assemblage of people, many from the highest circles of life, bright, animated, in full possession of all that is splendid in womanhood and manhood; to know that they sleep, eat, work, with all the functional activity of a God-given nature, without the stimulus of "pills," should have its lessons without necessarily endorsing popular fallacy.

We are rapidly learning that to cure a patient is not so often to cast out disease by medicine as it is to return to natural methods of diet, rest, exercise, etc. . Most generally the individual requires the special care rather than the disease. It is an everyday experience to meet those who are courting sickness through ignorance of natural laws, who need to be shown the way to health, rather than to be given medicine.

"Of all the ills that suffering man endures,
The largest fraction liberal nature cures."

The evolutions of medical practice, assisted by sanitary science, that brightest star of the closing century, has curtailed the once unlimited boundary of therapeutics, and has simplified its methods.

The alpha and omega of typhoid fever prescribing is no longer quinin, but diet and nursing. Innocent childhood with innocuous croup is no longer vomited with turpeth mineral, but is equally relieved by the gentleness of aconite and spongia; and in diphtheria, the long list of horrid doses has given way to antitoxin and supportative treatment. While in puerperal convulsions the unfortunate victim of her own economy is no longer held in the vise of overpowering hypodermics, but the system is rationally relieved of poisoned blood and the life-giving impetus of an intravenous transfusion takes its place.

Having been reared under influences which prompted relentless dosing for every ailment; when Watson was the authority recommending the scarifying and blistering of every pneumatic patient; when water was denied to the burning thirst of fever till tongues were parched and nights were filled with dreams of constant drinking; having lived to see the decadence of nauseating compounds and temporizing dilutions, we thrice welcome the uprising of a new dispensation of medicine, which puts faith in natural methods and a few well-proven drugs, simply administered.

Were we to retrospect 30 years of general practice, to select one from many experiences, to leave as a parting injunction to the rising generation of physicians, it would be a request in the interest of humanity to simplify prescribing, in using the smallest dose and the least medicine possible to accomplish the therapeutic purpose. (And all this from an allopath—all of his indications for the remedies stolen from the homœopathic *Materia Medica*. H. C. A.)

American Medicine.—The Trio.

SELECTIONS.

The Lady Physician.

[In the April issue of the *St. Louis Medical and Surgical Journal*, Ohmann-Dumesnil editorially comments as follows upon "The Lady Physician." Ohmann-Dumesnil is a man who knows many things, his ideas

are generally pretty good, and those on this special topic are unusually so.]

We have recently had the pleasure of reading an editorial in a medical journal, which is characterized more by the number of its pages than by its weight, having the above title. We also receive an exchange whose title is the *Woman's Medical Journal*. We are really much surprised at the latter. The *Ladies' Home Journal* should have served as an example, but our physicians of the female gender have preferred using the title given above. As a cook lady or a wash lady or even a scrub lady might ejaculate, "What horrid taste" that was. To quote our ultra-esthetic contemporary :

"The demand for lady physicians has greatly increased in recent years. There are said to be now 6,000 of these in the United States alone. In English countries there are 396 lady physicians. Many of these connect with their medical work that of administering spiritual consolation, thus giving counsel for the soul as well as for the body. The first lady physician was Elizabeth Blackwell, who graduated as such in 1849. Three years later Philadelphia boasted of six lady doctors. In 1889 there were 3,000 registered in the United States. The first lady physician in France was Madeline Bres, who graduated in 1875, and there are now eighty-five in that country, seventy-one of whom are practicing in Paris. Under Lady Dufferin's influence hospitals in India entirely in charge of women increased to thirty as early as 1888. In 1896 the number had swollen to 133. In 1894 the Sultan of Turkey forbade women to study medicine in his dominion, but foreign lady physicians are yet permitted to practice there. Egypt has two lady doctors, twenty are in Italy, while Roumania, Norway, Sweden, Denmark and Finland each have lady doctors, who are doing good work. In fact, lady physicians are no longer an experiment, but are fast becoming an important factor in moral influence. No one is better fitted to become just what a physician should be—an angel of mercy to the afflicted—than a Christian lady. Gentle by birth, and refined by proper education, she may exercise the most benign influence upon those with whom she comes in contact, even to the salvation of their souls."

We are sorry indeed to see such an ill-advised expression creep into the pages of a medical journal. There is certainly nothing nobler than a woman and a womanly woman. The mother of Christ was not a "lady," nor was the mother of the Grachii. This mawkish, ill-placed idea of "lady" must be dropped by serious men. It is equivalent to that of "gent," and of just about as much importance and force. We are tired of the "lady," and so are women. Sarah Hackett Stevenson is a woman, and we admire her all the more because she is. A woman has a spine; a lady "has a mass of gelatinous matter of dubious quality instead of it.

The mothers of all our great men were women. "Ladies" never bear children if they can help it. A woman doctor is one with a mission; a "lady doctor" parts his hair, his whiskers and his name in the middle, and wears trousers. God forbid that we should have "lady" doctors in trousers or skirts. There is a limit to human endurance, but certainly all rational beings will admit that it must be drawn at the "lady" doctor, male or female.

The writer of the editorial we have quoted has not been sufficiently thorough in his illustrations. There are women doctors in Russia prominent and eminent, among whom is Pauline Tarnowsky, who has written works which are unfortunately unknown to most English readers. Her researches in anthropology and other subjects are known throughout Europe, and almost entirely if not totally ignored in this country. Such a colleague would certainly repel the name of "lady" doctor, and justly so. No, let us leave the true woman remain upon her pedestal and not try to transform her into a "lady." We have too many of the latter already posing as idols which investigation shows have feet of clay. Our mothers were or are women, so are our wives and daughters; let us not throw them down from their high positions. The "ladies" will fall down of themselves.

Why the Mouth Should be Covered During the Operation.

The reasons that have led to the practice of covering the mouth during the performance of a surgical operation are apparent from the following studies of the saliva spray in expired air:

Hermann Koeniger has recently shown (*"Zeitschrift f. Hygiene u. Infectiouskrankheiten."* xxxiv., 119,) that minute drops of saliva emitted during the acts of speaking, coughing and sneezing in a room where there is no perceptible air current, may be driven forward to a distance of twenty-one feet and more or less scattered in all directions, upward to at least half that distance, and even behind a person speaking or coughing..

The saliva drops are expelled only when the expired air meets with a certain amount of resistance. They are not disseminated by a simple act of expiration without effort, nor in the pronunciation of vowels. Their dispersal during speech takes place very differently in different individuals. It is trifling from speaking in a deep voice, but may be quite forcible as a result of whispering. The germs thus carried into the air do not remain long suspended. In Koeniger's experiments they were almost always deposited within an hour—most of them in ten minutes—when doors and windows were tightly closed and the air was still.

These drops are real microscopic balloons, each having in its centre

an air bubble. When this bursts the contained germ, being heavier, falls to the ground. The author's experiments show that colonies of bacteria developed upon the surfaces of sores originate not from a single germ, but from several.

The diffusion of saliva drops is most marked when caused by coughing or sneezing. If the germ is bigger than the *Bacillus prodigiosus*—as large, say, as the *Bacillus mycoides*—it is carried a shorter distance, and the resulting danger is proportionately less. Hence, the dispersal of germs by this means is most to be feared in the case of the smaller microorganisms, such as those of influenza, of the plague, whooping-cough, pneumococci, streptococci and staphylococci.

The bacillus of tuberculosis, that of the plague and that of diphtheria are larger than the *Bacillus prodigiosus*, but smaller than the *Bacillus mycoides*.

The more pathogenic microbes there are in the mouth the greater the danger of infection. Washing out the mouth and frequent gargling will lessen the number of such diphtheric bacilla as are capable of removal, and so far will be of service. Simply holding the hand or a handkerchief before the mouth prevents the ejection of saliva charged with tuberculosis bacilli. Talking should be avoided during an operation. Other precautionary measures, such as covering the mouth with a gauze mask, etc., naturally suggest themselves.

Disinfection of the Hands from the Dermatologists Point of View.

A single pyogenic coccus is of infinitely more importance to the patient during an operation than an army of saprophytes, and consequently every suppurative lesion on a surgeon's hand must be not only disinfected, but thoroughly and persistently treated until long healed. Disinfection is less important than the after-treatment of the surgeon's hands in case of any morbid process. Alcohol is a harmless and effective disinfectant and its bactericidal power might be enhanced by adding the tincture of benzoin or benzoic acid. The alcohol, however, is not fully effective unless it is kept in contact with the tissues for a long time, over night at least. As a practical dermatologist, Unna recommends that the surgeon should scrub his hands before retiring, and wrap them in an alcohol compress and then in rubber tissue. When this alcohol dressing is removed in the morning the hands should be thoroughly lathered with a medicinal superoleaginous soap (Unna's ueberfettete Seife), and wiped on a sterile towel. The soap closes the pores and all germs alighting on the surface are washed off with the soap just before operating. In order to thoroughly appease the surgical conscience, he adds, soap containing sublimate might be used.

Pyocyaneus Infection.

The *Bacillus pyocyaneus* is to be specially feared as a source of secondary infection in children. When the tendency to necrosis is too slight to be recognized we must bear in mind that if a pustule exhibits a hæmorrhagic centre not due to trauma or to a general purpuric or scorbutic tendency, and if a probe passed lightly into such a pustule or vesicle find an area of softening and disintegration of the base or walls of the lesion, there is evidence enough of a necrotizing process. A child with lesions of this description had better be isolated and treated with all care, for it is almost certain that a dangerous state of affairs is present.—*Med. Review of Reviews.*

Burns.

Burns are, for convenience, divided into three classes:

A burn of the first degree is one that produces redness of the skin without the formation of vesicles. The skin becomes a source of sensation of heat and burning. Burns ordinarily due to exposure to the sun's rays would come in this class.

In the second class, the skin must be exposed to a higher temperature and for a longer time, and yet not sufficiently strong to destroy the texture of the integument. In this class vesicles are formed, after exposure for a few hours. These vesicles may be coalescent or discrete and, when punctured, serum flows out.

In burns of the third degree, the heat, in whatever manner applied, must produce a destructive effect upon the skin. The blood and lymph vessels are destroyed and a condition of gangrene is produced, and within a few days a ring of demarcation is formed, indicating the amount of skin destroyed. Consequently suppuration and sloughing take place, followed by granulations and formation of scar tissue.

Burns of the first class are usually treated by applying some sedative lotion. The following is of service:

Aquæ calcis, Olei olivæ, equal parts of each.

M. Sig.: Apply on borated gauze.

Any application that will exclude the air is of service in relieving the itching and burning pain.

For the second grade, a great many dressings may be used, such as carbolized vaselin, ointments containing a large amount of boric acid, mild alkaline lotions, and when the blebs are very large, they may be punctured with an antiseptic needle, followed by the application of antiseptic dusting powder, such as boric acid or subnitrate of bismuth. In order to exclude the air the following is recommended in the milder form:

Acidi salicylici, fifteen grains; collodion (flexible), one ounce.

M. Sig.: Apply locally on antiseptic cotton.

In the third grade, the danger of infection and consequent suppuration must not be overlooked. The antiseptic powders are of great service, such as iodoform, eucrophen and boric acid. Kaposi and Hebra give preference to continuous immersion of the part in water at a temperature most soothing to the skin.—*Journal A. M. A.*

Soda Compresses in Suppuration.

G. E. Vladinrioff, according to the *Philadelphia Medical Journal*, states that he has obtained splendid results from the use of soda compresses in cases of burns of the second degree, burns of the third degree, suppurating processes, contused and incised wounds and suppurating lymphatic glands. He employed it as follows: 1. A layer of gauze saturated with a 2 per cent. solution of soda, was applied. This was covered with a piece of oilcloth, cotton and a bandage. The compress was changed two or three times in twenty-four hours. 2. The gauze next to the body was not saturated, but kept wet with the soda solution by pouring on the solution three or four times daily. 3. Several layers of gauze saturated in soda solution were placed over the suppurating surface, these were covered by a thick layer of boric acid and camphor salve, then a piece of oil silk, cotton and bandage. Such a compress remained moist one or two days.

An Eddy Prayer Against Dyspepsia.

The following sample of "Christian science" is quoted by Samuel Lloyd Luckey in the *Journal of Physical Therapeutics* from one of the Eddyite publications, "Faith Healing and Christian Science," by Miss Alice Fielding, p. 214. It is a prayer for a dyspeptic, drawn up by Mr. Hazzard, president of the New York School of Primitive and Practical Christian Sciences. The capitals of the original are followed:

"Holy Reality! We BELIEVE in Thee that Thou art EVERYWHERE present. We really believe it. Blessed Reality, we do not pretend to believe, think we believe, believe that we believe. WE BELIEVE. Believing that Thou art everywhere present, we believe that Thou art in the patient's stomach, in every fiber, in every cell, in every atom, that Thou art the sole, only Reality of that stomach. Heavenly, Holy Reality, we will try not to be such hypocrites and infidels every day of our lives as to affirm our faith in Thee and then immediately begin to tell how sick we are, forgetting that Thou art everything and that Thou art not sick, and therefore that nothing in this universe was ever sick, is now sick, or can be sick. Forgive us our sins that we have this

day talked about our backaches, that we have told our neighbors that our food hurts us, that we mentioned to a visitor that there was a lump in our stomach, that we have wasted our valuable time, which should have been spent in Thy service, in worrying for fear that our stomach would grow worse, in that we have disobeyed Thy blessed law in thinking that some kind of medicine would help us. We know, Father and Mother of us all, that there is no such a thing as a really diseased stomach; that the disease is the Carnal Mortal Mind given over to the World, the Flesh and the Devil; that the mortal mind is a twist, a distortion, a false attitude, the HARMATIA of Thought. Shining and Glorious Verity, we recognize the great and splendid Fact that the moment we really believe the Truth, Disease ceases to trouble us; that the Truth is that there is no Disease in either real Body or Mind; that in the Mind what seems to be a disease is a False Belief, a Parasite, a hateful Excrescence, and that what happens in the Body is the shadow of the Life in the Soul. Lord, help us to believe that ALL Evil is Utterly Unreal; that it is silly to be sick, absurd to be ailing, wicked to be wailing, atheism and denial of God to say, I am sick. Help us to stoutly affirm with our eyes fixed on Thee, that we have no dyspepsia, that there is no such thing, that there never was any such thing, and that there never will be any such thing. Amen.—*Jour. A. M. A.*

OBITUARY.

S. H. Talcott.

Seldon Haines Talcott, A. M., M. D., Ph. D., was born at Rome, Oneida county, N. Y., July 7, 1842. He received his primary education in his native city. Later he entered Hamilton college, where he graduated in 1869. His college course was interrupted by a year's service in the army in 1864, where he served in the engineer corps. In the fall of 1869 he entered the New York Homeopathic Medical College, from which he graduated in 1872, being the valedictorian of his class.

Immediately after receiving his medical degree he entered into partnership with his preceptor, Dr. E. A. Munger, at Waterville, N. Y., whose daughter, Miss Sarah, afterward became his wife.

He continued in private practice until the spring of 1875, when he was appointed chief of staff of the Ward's Island Homeopathic Hospital. This position he retained until April 13, 1877, when he was unanimously elected medical superintendent by the board of trustees of the Middletown State Homeopathic Hospital for the Insane.

He died June 15, 1902, just one month after the celebration of the

twenty-fifth anniversary of his appointment to the position which he had so ably filled.

It has been the fortune of few individuals to attract and hold the close friendship of so many men, both within and without the ranks of the medical profession.

Personally Dr. Talcott possessed many very attractive qualities. He was amiable, genial and with a kind word for everyone, an omnivorous reader, with a very retentive memory and a remarkable ability to impart knowledge, a gifted writer and an attractive speaker, a consistent and ever faithful friend and a generous and considerate opponent.

The homeopathic medical profession has lost a strong champion, the insane a true friend and the world an honest, upright and thoroughly good man. We who knew him best have lost a loving comrade.

We will all keenly feel his absence, his cheery words and the hearty grasp of his right hand of friendship.

The younger men have lost an able teacher, a wise counselor and an encouraging helper.

Few men will be so missed.

It may be truly said that the world is better for his having lived. He accomplished a great work and left many friends and no enemies.

A. P. W.

Wm. Tod Helmuth.

This noted surgeon, poet, gentleman died on May 15, and there ceased to live the most widely known and best loved exponent of our faith in this country. The man who first showed to the world that the oft-repeated cry of the old school that "homeopaths are not surgeons" was false.

He was born in Philadelphia in 1833. He graduated in medicine from the Homeopathic College of Pennsylvania (now Hahnemann) in 1853, was elected professor of anatomy of that college in 1855, and published his first book on surgery the same year. In 1858 he removed to St. Louis, Mo., and was made professor of surgery and dean of the St. Louis College of Homeopathic Physicians and Surgeons. He was elected president of the American Institute of Homeopathy in 1867. In 1870 he went to New York city, where he was professor of surgery in the Homeopathic College. In 1888 Yale University gave him the degree of L.L. D. For the past ten years he has been dean as well as professor of surgery of the New York College.

Richard Hughes.

On April 2, at Dublin, Ireland, where he was temporarily, Richard Hughes died very suddenly.

His home formerly at Brighton, was at Albury, Guildford, England. He was one of the best known and most prominent of English homeopaths, a voluminous writer and a man who was well beloved by all who knew him. He was born in 1836, became a member of the Royal College of Surgeons of England in 1867, and was the possessor of many honorary degrees. Hughes' "Pharmacodynamics" appeared in 1867. He had been a professor of materia medica in the London School of Homeopathy, a president of the British Homeopathic Society, and at his death was editor of its journal. For many years he was editor of the British Journal of Homeopathy, and had been secretary of the various International Homeopathic Congresses.

W. F. Curryer.

Dr. William F. Curryer, of Indianapolis, Ind., was stricken with apoplexy July 5th, 1902, and died while being taken to his home in an ambulance. Many of our readers knew Dr. Curryer as a most estimable man, an accomplished physician and surgeon and an ardent student. Dr. Curryer was born in Butler County in 1845, graduated from the Eclectic Medical College of Cincinnati, Ohio, in 1874 and took a post graduate course at Bellevue College, New York, a few years later. He had been president of the Indiana and National Eclectic Medical societies and of the American Association of Official Surgeons, and at the time of his death was a member of the Indiana and Indianapolis Homeopathic societies. Ever since the organization of the Indiana State Board of Medical Examiners, Dr. Curryer has been its secretary and was a prominent advocate of medical legislation in his state. The doctor leaves a widow, two daughters and a son to whom we extend our sympathy, and with whom the progressive medical men of our country join in mourning the loss of a good physician and man.

MINNEAPOLIS HOMŒOPATHIC MAGAZINE.

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EDITORIAL.

The American Institute of Homoeopathy.

The oldest of national medical societies in this country held its fifty-eighth annual session at Cleveland, Ohio, June 17 to 21. On the 16th and 17th of June occurred the session of the O. O. and L. and Surgical and Gynecological societies, both of which latter organizations presented excellent programs that brought out a large attendance. In the O. O. and L. society the chief topics discussed were the Treatment of Cataract, Mastoid Diseases, and Glaucoma, each series or set of papers being thoroughly discussed. Owing to the large number of papers the next year's program will be somewhat limited. In the Surgical and Gyneological society "Shock" was treated at length by Dr. Sidney F. Wilcox of New York, and Dr. Van Lennep of Philadelphia had an able essay on the treatment of kidney and liver affections by stripping off the capsule or scarifying it to form adhesions and provide additional blood supply, reporting marked improvement and cures in Bright's disease and cirrhosis of the liver.

Packard of Boston had an elaborate paper on the vermiform appendix, an organ which he believes to be retrograding by a species of evolutionary change and that the human race will eventually be an ap-

pendixless race, mildly suggesting the advisability of removing the organ in all children as is now advised in regard to the foreskin.

The weather was ideal, the hotels exorbitant, the attendance large, the enthusiasm marked, the assembly hall noisy, the entertainment by the Cleveland contingent enjoyable and the meeting a grand success.

During the session of the institute appropriate resolutions relative to the demise of Dr. Richard Hughes of Brighton, England, were adopted and a fund of about \$1,000 for his family was raised.

Beautiful and impressive memorial exercises were held, rendered more than usually touching owing to the number of dearly beloved members recently passed away, among them Alonzo Boothby of Boston, William Tod Helmuth of New York city, a member of the committee having in charge the memorial exercises, who was to have read a poem on the occasion, but who died just a month previously, and Seldon H. Talcott, who died but a few days previously, very unexpectedly.

Dr. Talcott had been honored but one month previously by a dinner in New York city, at the conclusion of twenty-five years' service as superintendent of the Middletown, N. Y., state insane hospital.

The politics of the institute were red-hot as far as the presidency was concerned, landing J. P. Cobb of Chicago in the presidential chair, a most worthy successor of a worthy president (J. C. Wood of Cleveland). The vice presidents are H. F. Biggar of Cleveland and M. Belle Brown of New York city; general secretary, Chas. Gatchell, Chicago; recording secretary, J. Richey Horner, Cleveland.

Necrologist—C. A. Weiricke, M. D., Chicago.

Censor—Millie J. Chapman, M. D., Pittsburg.

Chairmen of Committees.

Organization, Registration and Statistics—T. Franklin Smith, M. D., New York.

International Bureau of Homeopathy—Geo. B. Peck, M. D., Providence, R. I.

Drug Provings—Howard P. Bellows, M. D., Boston.

Publication—Geo. F. Shears, M. D., Chicago.

Medical Examining Boards—H. H. Baxter, M. D., Cleveland.

Transportation—C. E. Sawyer, M. D., Marion, O.

Press—DeWitt G. Wilcox, M. D., Buffalo.

Resolutions—B. F. Bailey, M. D., Lincoln, Neb.

Memorial Services—E. B. Hooker, M. D., Hartford, Conn.

Proposed Change in Publication of Transactions—C. E. Walton, Cincinnati, O.

Chairmen of Bureaux.

Materia Medica—Geo. Royal, M. D., Des Moines, Iowa.

Clinical Medicine and Pathology—John W. Dowling, M. D., New York.

Pedology—Anna Spencer, M. D., Batavia, Ill.

Homeopathics—T. Y. Kinne, M. D., Paterson, N. J.

President Wood, in his address, reviewed the progress of homeopathy as follows:

"The American Institute of Homeopathy convenes tonight under very different conditions from those which confronted it fifty-seven years ago at its first meeting. Then it had a membership of but forty; now it has over two thousand. Then there were no homeopathic colleges and no homeopathic hospitals; now there are twenty colleges and 340 hospitals, dispensaries and sanitariums worth several million dollars. Then there were two journals, now there are thirty-two. Then the literature was limited to a few books devoted to the giving of medicine, now the whole domain of medicine has been covered.

"Then for a so-called regular to consult with a homeopath meant professional ostracism; now such consultations are daily and are openly advocated by men occupying the highest positions in the American Medical Association. Up to five years ago no credit was given by old-school colleges for the time spent in homeopathic schools; now students are placed on a par with the students of the older school. Persecution by the old school has been followed by tolerance and respect, and this, unless carefully guarded, will eventuate in assimilation.

"Has homeopathy fulfilled its mission, and should we now permit ourselves to become a part of the dominant school of medicine?

"Amalgamation and co-operation constitute the spirit of the times, but the time for amalgamation will not arrive until homeopathy itself has perfected its peculiar system of therapeutics and thus have won over by pure reason and experience the large body of oncoming doctors. Neither will it be possible until the old school is willing to teach homeopathy in its colleges with perfect honesty and liberality. It has been found, upon investigation conducted some years ago, by postal card, in Ohio, that nearly every medical man under forty years of age was willing for the establishment of a homeopathic chair in the old school colleges, and every medical man over that age refused his consent."

Referring to old school therapeutics, he said empiricism of the rankest kind still characterizes its literature and teaching even its application of homeopathic remedies.

"Vaunted specifics come and go like the morning dew. Universal panaceas are heralded only to follow the fate of thousands of others, so that the old school practitioner has become a medical agnostic, relying for his success upon mechanics, dietetics and prophylaxis."

Homeopathy, on the other hand, is built upon a solid rock. It has not varied from the moment of its discovery.

The section of Gynecology of the institute had a dainty souvenir program with half-tones of its writers and leaders of discussions.

Among the new seniors this year was C. G. Higbee, St. Paul.

A reorganization of the working plan of the institute was effected, details of which we will give later.

During the selection of the next meeting place, which will be Nantasket Beach, Mass., near Boston, Dr. T. Y. Kinne asked how near Boston it was, and Dr. E. B. Hooker happily responded, "As near as you (Dr. Kinne) are to the hearts of the institute." We owe thanks to Drs. E. L. Mann, Geo. F. Roberts and Frank Krafts for data for the preparation of this brief notice of the meeting.

The average death rate per thousand in the cities of more than 2,000 inhabitants in Minnesota during April was almost four times as great as in the remainder of the state, and about twice the average death rate per thousand for the entire state, according to the figures compiled by the state board of health.

The cities of more than 2,000, with a population of 632,327, reported 957 deaths, a death rate of 1.51 per thousand for the month, and a rate of 18.016 deaths per thousand per annum.

The remainder of the state, with a population of 1,119,068, reported only 466 deaths, a death rate of .415 per thousand for the month, or at the rate of 4.99 deaths per thousand per year.

BOOKS.

INTERNATIONAL TEXT BOOK OF SURGERY. BY AMERICAN AND BRITISH AUTHORS, edited by J. Collins Warren, M. D., L. L. D., Prof. Surgery Harvard Medical School, etc., and A. Pearce Gould, M. S., F. R. C. S., Surgeon to Middlesex Hospital, etc. Vol. I. General and Operative Surgery with 408 illustrations in the text, and 9 full page plates in colors, Philadelphia, W. B. Saunders & Co. 1900. Price \$5.00 cloth and \$6.00 sheep or half morocco per vol.

This volume of nearly 1000 pages is a valuable addition to the library of any medical man whether he be general practice or confines himself to the specialty of surgery.

The editors have been assisted in the preparation of the work by a corps of leading writers, men eminent in the specialty who have treated of the various topics entrusted to them capably indeed.

In the matter of treatment all antiquated methods have been omitted, thus adding to the value of the work while making it more concise.

The subjects of surgical pathology, symptomatology and diagnosis have been treated of in extenso and in a manner thoroughly up to date.

The names of such well known writers at H. C. Ernst, Prof. Bacteriology in Harvard, Geo. Ryerson Fowler, Prof. Surgery in the N. Y. Polyclinic; Weller Van Hook in the Northwestern University Medical School and Chicago Polyclinic; I. H. Cameron, Prof. Surgery in the University of Toronto; J. C. Da Costa, Prof. Clinical Surgery in Jefferson Medical College, Philadelphia; Wm. Watson Cheyne, Prof. Surgery, King's College, London; Rushton Parker, Prof. Surgery, University College, Liverpool; Lewis Pilcher, of N. Y. City, and the late J. B. Hamilton, formerly Prof. of Surgery in Rush Medical College of Chicago, etc., show that the character of the volume in its subject matter is all that could be asked, and the publishers certainly have done their work well and the result is all that could be desired.

NEWS AND NOTES.

The Minneapolis Homœopathic Medical Society meets on the second Wednesday eve of each month; Henry C. Aldrich, M. D., President; Adele S. Hutchison, M. D., Vice-President; O. K. Richardson, M. D., Secretary.

The State Medical Examining Board holds its examinations at the State Capital building in St. Paul, the first Tuesday in January, April, June and October, C. J. Ringnell, M. D., Minneapolis, Secretary. The homœopathic members are Adele S. Hutchison, M. D., Minneapolis; Thos Lowe, M. D., Slayton and A. B. Cole, M. D., Fergus Falls.

University of Minnesota.

On June 5 occurred the thirtieth annual commencement of this educational institution, graduating a class of 435 from its many colleges.

From the medical department there were graduated 116; of these 63 were in the old school medical college, 30 were from the dental college, 20 were from the college of pharmacy and from the college of homeopathic medicine and surgery there were 3 graduates, Drs. Earl Lester Hall of Minneapolis, Frederick Drake Rogers and Eugene Frederic Warner of St. Paul. Dr. Hall will be an interne at the Minneapolis city hospital for the ensuing year, Dr. Rogers will occupy a similar position at the city and county hospital in St. Paul, and Dr. Warner has secured the appointment as interne at the Metropolitan hospital, New York city, where he will succeed Dr. F. E. Mitchell, whose term of service expires next fall.

Dr. Wm. B. Roberts has finished his internship at the Hahnemann hospital, New York city, and is at home and associated with his father, Dr. Geo. F. Roberts, one of the leading physicians in Minneapolis.

Dr. J. B. Brown resigned sometime since from the Fergus Falls homeopathic third hospital for insane, and is in charge of a lumbermen's hospital at Farley, Minn.

Dr. Thomas M. Thayer, formerly of Middletown, N. Y., is an assistant physician at the Homeopathic Third Hospital at Fergus Falls, succeeding to the position held formerly by Dr. Brown.

Dr. D. W. Battin has removed from Shell Rock to Clarksville, Iowa.

Dr. Ira F. Richardson has removed from Kansas City to David City, Neb.

Dr. Ernest P. Mills of Olathe, Kan., is county physician to Johnson county.

Dr. Gioachino Pompili, for forty-seven years editor of *Revista Homeopatica*, died recently at his home in Rome, Italy.

Kansas homeopaths are agitating the subject of the control of the new state hospital for the insane at Parsons. Drs. Menninger, Swan and Harding have the matter in charge.

The Fox River Valley Medical Association, by recent action, will admit to membership any physician regardless of school.

Dr. Chas. Lowry, Topeka, Kan., is not only president of the Kansas Homeopathic Medical Society, but is also a member of the state board of health and a delegate to the Tuberculosis Congress, which meets this year in New York.

The International Homeopathic Association met June 24 to 26 at the Chicago Beach hotel. Dr. J. B. S. King is the secretary.

The *Journal of Homeopathics* has passed under the control and editorship of Dr. Harvey Farrington of Chicago, a worthy son of the lamented Dr. E. A. Farrington, the great teacher of *materia medica*.

In three years 280 insane soldiers have been sent from the Philippines to the government hospital for the insane at Washington, D. C., where in six month prompt recovery results in about 75 per cent of the cases.—*Medical Century*.

R. P. Miller of Oskaloosa, Iowa, was a recent caller; also Dr. E. C. Abbott of Black River Falls, Wis.

Dr. T. A. Caldwell, formerly of Chicago, has located at Hastings, Minn.

Dr. E. H. Pratt will conduct his fifteenth annual September class in official surgery at the Chicago Homeopathic Medical College during the week of September 8. Address him at 100 State street, Chicago.

The American Association of Orificial Surgeons will hold their fourteenth annual session at the Chicago Homeopathic Medical College September 10 and 11. Dr. Henry C. Aldrich, Minneapolis, is president and Dr. R. St. J. Perry, Farmington, Minn., secretary.

Dr. H. G. Bickford, since finishing his term as interne at the St. Paul city and county hospital, has become associated with Dr. W. S. Briggs of that city.

The Chicago Homeopathic Medical College expects to build a new \$100,000 hospital.

Dr. D. W. C. Fowler, Aberdeen, S. D., has returned home from Chicago much benefited by his operation.

Dr. Geo. F. Roberts, Minneapolis, and Drs. E. L. Mann, W. S. Briggs and C. G. Higbee of St. Paul, represented Minnesota at the A. I. H. meeting at Cleveland.

The Albany, N. Y., Homeopathic Hospital will erect a new building soon.

The Liberty, N. Y., health board has ordered that no tuberculosis sanitariums be conducted in the city, that tubercular patients are to be quarantined, etc.

The Cleveland Medical and Surgery Reporter for May, the A. I. H. number, is especially fine.

Dr. W. A. Gulier, Watkins, N. Y., 87 years old, is still in active practice.

Dr. A. B. Williams, Hahnemann, Philadelphia, 1902, has located at Wilmont, Minn.

Dr. W. H. Replogle (C. H. M., C. '02) has located at Delavan, Minn.

Dr. F. D. Curtis (C. H. M., C. '01) is doing well at Fisk, Wis.

Dr. W. C. Lathrop (C. H. M., C. '02) has located at Clarksville, Iowa.

Dr. S. Woodward (C. H. M., C. '02) has located at Osage, Iowa.

Dr. J. R. Kippax of Chicago was appointed a delegate to the Tuberculosis Congress in New York City by Gov. Yates.

Dr. A. C. Leonard, Lexington, Ky., is attending surgeon of the I. O. O. F. Hospital for Widows and Orphans at that place.

Dr. R. N. Tooker, Jr., is assistant house surgeon at the Hospital of the Illinois Steel Co. at South Chicago.

Dr. I. D. Kaufman of State Center, Iowa, was recently married to Miss Nellie H. Smith of Whitten, Iowa.

Dr. P. C. Binneweis is doing well at Milton, Wis.

Dr. E. E. Axtell, Marinette, Wis., was doing post graduate work at Chicago recently.

Dr. Eugene H. Porter of New York City has been reappointed a member of the board of managers of the Gowanda, N. Y., state hospital.

Dr. M. R. Balliet has removed from Liscomb to La Porte City, Iowa.

Dr. P. L. Parsons (C. H. M. C., '02,) has located at Traer, Iowa.

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When to Operate in Appendicitis.

FRANK C. TITZELL, M. D.,

CHICAGO, ILL.

Prof. of Surgery, Hering Medical College.

There is perhaps no subject in medicine on which there is such a division of opinion, as there is on the subject of appendicitis in general, and when to operate in the same, in particular

After long years of discussion and study, the profession is still divided on the subject,—one class contending that we should operate on every case, as they all are, or speedily become surgical, while another class go to the other extreme, and contend equally as vigorously that these cases if treated properly, by the indicated remedy, need never be operated upon.

It occurs to me that both are theoretically and practically wrong, inasmuch as they start with the premise that all cases are the same etio-logically, clinically and pathologically. This we know by observation to be absolutely untrue and starting as they both do under a false premise, how can they come to other than a false conclusion?

It seems to me that the safe and sensible way lies half way between these two extremes. There is no longer any doubt but that all cases are not operative. We have all had or seen cases,—where there was no question about the diagnosis,—recover without operation. Those of us, too, who are working along surgical lines, have often seen cases that were apparently surgical from the very beginning, tampered and puttered with and much valuable time lost, while the supposedly indicated remedy was getting in its work, until operation finally resorted to, ended disastrously to the patient, and perhaps to the reputation of the surgeon who did it.

Clinically these cases may be divided into three classes. The first are the simple catarrhal variety, and are amenable to medical treatment. They are the ones upon which medical men base their extravagant claims of curing all cases of appendicitis with the indicated remedy. They run a mild course, do not abscess nor perforate, end by resolution and the symptoms are at no time severe. The tumor, if any is present, is small and the whole trouble terminates in three or four days.

These are not surgical cases, but may become such by recurrence, and herein lies their danger. The swelling of the mucous membrane incident to the inflammation may close the lumen of the appendix and confine the catarrhal discharges which later become infected and undergo decomposition and thus cause an abscess in the appendix. The catarrhal cases that require an operation are those that have taken this course primarily or have recurred and taken it at some later period in their clinical history.

We can safely say, therefore, with reference to catarrhal cases,—treat them as medical cases in the beginning of their career. If they do not improve in two or three days, the temperature and pulse begin to rise, tumor begins to form, and we have evidence of steady progression of the disease, we should operate without further hesitation. In recurrent cases the operation should be done if possible between the attacks.

The second variety of cases are those that are quickly attended by suppuration and the formation of an abscess, no matter from what cause. These are surgical from the beginning. The symptoms are marked and severe. Special indications that point to suppuration are the high temperature, usually with morning remission, a peculiar, thready, high pulse, and localized tenderness with the tumor and boggy in the iliac region.

These cases should be operated upon and the appendix removed when possible, care being taken not to disturb the firm adhesions that we usually find walling off the abscess from the abdominal cavity. It is now conceded, I believe, to be better surgery to leave the appendix and not disturb the adhesions than to try to remove it and break them up. This rule also applies to the catarrhal varieties.

In a third class I put the so-called fulminant cases,—those that perforate quickly and terminate abruptly if not relieved by some means. Here operation is indicated *toute de suite*. These cases come on quickly, are prompt and decided in their action, severe and fatal in their termination unless relieved by operation, and they should be met in this same prompt and decisive way. No time should be wasted in waiting for adhesions to form, something we seldom get before death overtakes the un-

lucky victim. Rapid action is the desideratum here. Remove the offending member and cleanse the peritoneal cavity to prevent if possible the oncoming of a fatal septic peritonitis. This is the danger and the usual termination of this class of cases, if left to themselves, and it also frequently follows a operation especially when the same has been deferred for any cause.

In summarizing and in conclusion, I think I may say that conservatism and the welfare of our patient should be uppermost in our thoughts when making up our minds as to whether a case is operative or not, and if it is, when to operate.

Each case is a law unto itself and must be decided from its own clinical behavior, yet as a general rule to be applied in the vast majority of cases, and deviated from when necessary, we may say:

1st. Operate in catarrhal cases only when abscess forms. In recurrent cases, if possible, between the attacks.

2nd. Operate on all cases of the second variety. Remove appendix, if possible, without disturbing adhesions. If this cannot be done, drain cavity and leave appendix.

3rd. Operate at once and without delay. Wait for nothing, not even for daylight, in these fulminant cases. Remove the appendix, making a careful toilet of the peritoneum, and give the patient the little chance that there is for life.

6413 Kimbark Ave.

A Voice From the Inner Man.

J. T. LELAND, M. D.,

TINTAH, MINN.

Stomach was just sweeping out after a hard day, when suddenly he shuddered, for a cold shower had precipitously drenched him. "Beer! and ice cold, too. Bah! Another night's session. Say, Liver, I want to talk to you after I have disposed of this mess." A sleepy grunt was the only response echoed by squirms and gurgles from below as Duodenum and Jejunum resented the intruding liquid.

"Not very congenial company for a fellow who has to slave the way I do, but then you can't blame them. Look at that Liver. A more patient, plodding individual you will go far to find; yet he suffers all the indignities of a corrupt organism, forced to eliminate that which should be thrown off by physical exercise. And as for Duodenum, old fellow, I know what he has to contend with, and there isn't anything I wouldn't do for him if I could, even though he does think I'm responsible for his plight.

"Oh, dear, I must brace up; it's about time for the broiled lobster to come chucking down. I never cease blessing the slow waiters. Heavens! what if they were there with the goods—as Pancreas would say—as soon as man plumped himself down in his seat all puffing and heated. It fairly makes my gastric juice curdle.

"There! hear that? That's what a man calls an exclamation of satisfaction. 'A feast fit for the Gods.' It may fit the Gods, but nine times out of ten it's two or three times too large for the sinner that partakes of it.

"I have been trying to make man aware of this fact, but I can't bring myself to adopt extreme measures. Letting his food lie for an hour or two after I should have prepared it for assimilation has no effect. It's like doctors sending monthly statements—they hope it will bring results, yet they *know* it won't.

"Now, look at that. What! I'll be hanged if it isn't something *new*. Do you know, for the last ten years I have been keeping track of the 'dainty dishes,' and this one makes the 3749th. If you doubt my word, count those plugged peptic glands. I always tuck these 'new dishes' to one side until I'm through with the rest; then I cautiously approach it—well smeared with gastric juice—and watching which way it's going to jump, always ready to grapple with it should it exhibit any unexpected move. Sometimes it lies perfectly quiet, and when I try to stir it up it's quite dead; and *heavy*? well, I guess. Then again it will suddenly crumble, and I experience a burning sensation throughout my entire mucous lining. It keeps me guessing like the game Ileum, Duodenum and Jejunum play—'Button! Button! Who's got the Murphy Button?'

"Here comes the real thing now, and I won't have time to go into details, so I'll just call them off as they come, pointing out their chief characteristics as they appear:

"Beer *preceding food* is called an appetizer; should it *follow a drink* it's spoken of as a 'chaser.' The man evidently being ashamed of introducing such a substance endeavors to cover up or counteract its action, and adds insult to injury, with the result that man is content and *I* am paralyzed; yes, sir, temporarily laid out, and because I make a superhuman effort and overcome the indignity, they complacently smile and declare that they, are 'stimulated, by Jove!'

"No sooner have I regained my feet and got my mucous folds in a fairly respectable condition when this mass which meets your eyes is shot down—Bolted! Yes, sir, that's it. Bolted!

"Now, why man persists in dousing me with ice cold water just as I am beginning to insinuate my digestive fluids nicely between the hunks he has thrown down, I can't understand, unless he is trying to keep me away—not being satisfied with cheating Ptyalin out of her dues—to all

appearances intent upon Duodenum receiving the 'feast for the Gods' in the original package."

"Thank the Lord, we have one strenuous organ among us. Appendix Vermiformis. He's small, but, oh my, he does get his back up sometimes. and makes us all shiver and quake. He's doing a great work, and in time I think will bring man to see the error of his ways. They say he has no occupation. To *my* mind he's the governor of man's digestive organs, and only makes himself known when man becomes forgetful of everything but that he has a mouth into which he must throw something and everything, and get it out of sight in a hurry.

"Now, that lobster was not half bad, and if man would only stop at that I would not object to his night work once in six weeks or such a matter.

"It's the something hot and then something cold,
With sauce that's spicy and things that mould;
It's the constant dread of things like lead,
With Tabasco sauce and cheese that's dead.'

"That's quoted from Liver. Don't blame him; he feels just as bad as that.

"This is tantalizing. Sweet breads! and coming at this time! Oh, why, learned man, do you introduce that which is reasonably digestible *after* you are decently filled with indigestibles? And I am so fond of sweet breads, too; but it is only one of the good things in life that comes too late.

"Now, these cream potatoes show their displeasure at being accompanied by pickles, and I don't blame them. The only good pickle is the unpickled one.

"It is at this stage that we may look for any one of fifty things that the most degenerate billy goat would turn aside from. Mince pie, *hot*. Wait a minute—ah, yes, and cheese as I anticipated; and if I'm not mistaken there will be—Ugh! yes, a deluge of black coffee.

"Now, any reasonable person would—aye, an *unreasonable* person, too, if he had stood by and watched me do battle with this host—say, 'Well done—(yes, they try to do me all right)—thou good and faithful servant, take a rest.' But right here is where I suffer the unkindest cut of all.

"After things are put in the best possible condition under the circumstances, then comes slinking down—yes, I'll say that much for him, he does slink (he knows he doesn't belong here)—a small, flat, roundish tablet of grayish color. I remember the first time I tackled him. I was just closing up after handing my work over to Duodenum, and as I turned

around there was this thing. It was bustling around fit to kill, and as I was about to make a combined attack upon it, it disappeared with a look of disappointment that I shall never forget. The next day it appeared at about the same hour, but earlier, and as I was about to assist in its disposal it resisted, and I afterwards learned that it had the impertinence to get in the way of the peptic glands, insisting that it was there to *assist* them—think of it!

"Well, it's an old story now, in spite of the fact that it's a bad thing. The Peptic glands got sluggish, and finally some of them stopped work altogether. I use them to tally new dishes with. And the tablets? Oh, I make the tally plugs out of them.

"I wish I were a man. They say they are the most intelligent of all animals."

X-Ray Injuries.

Codman of Boston (Phil. Med. Jour., March 8 and 15, 1902) gives the results of "A Study of the Cases of Accidental X-Ray Burns Hitherto Recorded." As to the cause of X-Ray injuries, Codman says: "The cause of X-Ray injuries is not known. It could not, of course, be determined by such a study as this. Since the author, in the course of his reading, has unavoidably reviewed the explanations of different writers on this subject, the reader may demand an expression of opinion. Most writers agree that the active cause is not heat, nor the brush discharge, nor the photographically active X-Ray itself, but some form of energy radiating from the platinum terminal, together with the X-Ray, and probably closely related to it, on the one hand, and to ultra violet light on the other.

The injuries themselves are classified under five heads: (a) skiagrapher's dermatitis. This occurs chiefly on the hands or faces of X-Ray workers—in those who are frequently exposed to the action of the rays, in tube makers, experimenters and professional skiagraphers. It results from repeated short exposures, usually from the use of the fluoroscope or from demonstration of the bones of the hand to an audience. It is most often of a mild degree, but with continued exposure may go on to ulceration and gangrene of the skin, even to involvement of the tendon sheaths and joints. In the less pronounced forms the skin appears chapped and roughened and the normal markings are destroyed; at the knuckles the folds of the skin are swollen and stiff, while between them is a peculiar dotting resembling small capillary hemorrhages. The nutrition of the nails is affected so that the longitudinal striations become marked and the substance becomes brittle. If the process is more severe

there is a formation of blebs, exfoliation of epidermis and loss of the nails. In the worst forms the skin is entirely destroyed in places, the nails do not reappear, and the tendons and joints are damaged.

- The next three classes of cases occur accidentally in patients who are exposed one or several times at short intervals for skiagraphs. They vary in intensity and may be directly compared with burns of the first, second and third degrees. They are essentially the same as the forms occurring in skiagraphers spoken of above.

(b) The mild cases are simply a transient erythema lasting perhaps a few days, followed by an exfoliation of superficial epidermis. There may be hyperesthesia of the skin and a slight burning sensation, but no real pain. In the hairy portions depilation may occur without inflammatory signs.

(c) In cases of the second degree there is a formation of blisters following the erythema; these may be serous or purulent; the condition resembles a scald, but is slower in healing and less acute in character.

(d) In the worst cases the process, instead of disappearing in a few weeks, seems to extend to the deeper layers of the skin and subcutaneous tissues. There is a formation of a leathery slough, surrounded by a brownish indurated swelling with ill-defined limits. The process is exceedingly slow and obstinate and possesses an almost malignant tendency to progress. It is very painful at times and resists treatment in a remarkable way.

(e) The fifth group of cases is composed of those in which some internal lesion is attributed to the X-Ray. There have been few such cases recorded and these have been in such an inexact and hypothetical way * * * that they seem to the writer to be undeserving of record.

As to the pathology, the writer coincides with the balance of opinion which attributes these lesions to a primary action on the trophic nerves of the bloodvessels and skin. The delay in the appearances of the lesions after the exposure, their progressive character, and their failure to react to stimulating treatment are the strongest reasons for this view. The reports of microscopical examination of the excised tissue agree in stating that the smaller arterial branches are occluded, and the appearances are not unlike those of necrosis and inflammation due to other causes. The severe lesions are rather atrophic ulcers than burns.

A study of the details as to apparatus, length of spark, quality of tube, voltage, distance and time of exposure; in other words, the factors under the control of the operator, shows extraordinary variations in effect. Most of the exposures mentioned by the reporters of the cases studied by Codman have been endured by other individuals without injury. Conditions which produce a severe lesion in one case, cause only a slight reaction in others.

The writer is still strongly of the opinion that this element of variation lies in the susceptibility of the patient, in the dryness or dampness of his skin; in his electrical resistance; in his anemia or plethora; in the acidity or alkalinity of his sweat; in his vasomotor irritability or in some other of the multiplicity of conditions which make a living organism different from a glass tube stimulated by a current of electricity.

Codman believes that the cases collected in his paper include most of the bad injuries, and assumes, by comparing the number of injuries reported with an estimated total number of exposures, that the chance of injury in an X-Ray exposure is less than one in ten thousand. This is simple enough arithmetic, but there are many unreported cases of injury and no one can make an approximately accurate estimate of the extent of the use of the X-Ray.

Regarding treatment our author says: The treatments which have been applied to these lesions have been many and for the most part unsatisfactory. Two main lines of treatment may be mentioned, (a) physiological rest and mild poulticing, and (b) excision followed by skin grafting. The first should be used at least until the process has become stationary and has ceased spreading. The second only when pain is severe and rest has not produced improvement. Carl Beck of New York (Med. Rec. Jan. 18, 1902) for the milder forms of X-Ray injury recommends the same treatment as for ordinary burns. The necrotic form requires speedy removal of the mortified tissues, the after treatment being conducted after the principles of the wound treatment. We know from personal observation that the deep ulcerations following X-Ray injuries require thorough extirpation of the affected tissues before healing will take place. We append the conclusions reached by Codman, for we consider them worthy of consideration by the operators of the numerous X-Ray machines in use today:

CONCLUSIONS.

1. The frequency of X-Ray injuries has been much exaggerated by the medical press owing to the wide publicity given to many early cases.
2. The writer has been able to collect somewhat less than 200 cases, less than half of which were serious, and about one-third of which occurred in X-Ray workers.
3. Judging from the experience with these injuries in Boston, it is the writer's opinion that a fair proportion of the severe burns are included in this series, while the dermatitis of skiagraphers is less well represented.
4. At a maximum estimate it is safe to say that not one patient in a thousand has been injured in the past five years by an X-Ray examination and in the past year not one in ten thousand.

5. More than two-thirds of these injuries occurred in the first two years of the use of the X-Ray. Only one mild case is reported as occurring in the current year, those cases in which the exposure has been made for therapeutic purposes being excluded.

6. The cause of X-Ray injuries is not definitely known. It is some form of energy closely allied to the photographically active X-Ray, and radiates with it from the platinum terminal.

7. The primary injury is to the nerves controlling the nutrition of the skin.

8. There is no good evidence of injury to the deeper tissues without primary interference with skin.

9. The important factors which contribute to the production of X-Ray burns are: the intensity of the current used to stimulate the tube; the quality of the tube, the distance and time of exposure; the idiosyncrasy of the patient.

10. The static machine is somewhat less likely to produce injury than other forms of apparatus.

11. From the data of the reported cases we can say that no burn has been produced by an exposure equal to or less than the equivalent of 5 minutes at 10 inches.

12. It is impossible from the data to show how intense an exposure must be to produce a burn, for a comparison of the cases shows that an inconstant factor or factors exist.

13. These inconstant factors are more likely to lie in the complex human organism than in the less complicated construction of the tube.

14. General experience has shown that soft tubes produce a more intense effect on the tissues than hard.

15. While we cannot control these inconstant factors, therapeutic exposures will continue to be dangerous, and it is therefore important to record the exact conditions of the patient's local and constitutional idiosyncrasies, as well as those of the tube.

16. In cases of injury the time before the appearance of the first symptoms has varied from a few minutes to three weeks. Five cases have remained latent for over three weeks; two of these for five months.

17. It is impossible to predict the severity of the lesion from the time of its appearance after exposure.

18. The writer suggests 10 minutes at 6 inches from the platinum terminal, as a standard therapeutic exposure. This will make comparisons between the inconstant factors easier.

19. Unless signs of dermatitis appear within three weeks after the exposure, they are unlikely to appear at all. In one-third of the reported cases the appearance occurred within the first four days; in one-half the cases before the ninth day.

20. In the ordinary X-Ray examination with fluoroscope or skiagraph, the operator takes the entire responsibility of injury ; in exposures for therapeutic purposes the patient shares the responsibility.

CORRESPONDENCE.

International Hahnemannian Association.

Dear Editor:—You ask me to say something about the meeting of the International Hahnemannian Association, which met in Chicago, June 24, 25 and 26, at Chicago Beach Hotel. The resident physicians deserve great credit for the excellent arrangements made for the comfort of its members. The hotel management was excellent and made all feel comfortable. This was the third meeting held in the West since the formation of the society in 1880 at Milwaukee. The reason for holding the meetings east was because more eastern men were interested in the objects and success of the society. The reading of the proceedings of past meetings is good evidence that the interest in the work has been well sustained. This was the largest meeting ever held in the history of the organization. The bureaus were well represented, both in the activity of the chairmen and the number of subjects in each. After the reading of each paper a free and full discussion followed, eliciting the fullest knowledge on the given subject. This is a much better way to gain such knowledge than to read all the papers on the bureau and have the discussion a random one, lacking point and concentration. The promptness of the chairmen prevented waste of time, and with three meetings each day much was accomplished. The evening of the second day a reception was given by the professors and alumni of Hering College, a pleasant social affair with good music and light refreshments. An interesting occurrence on afternoon of last day: A Scotch gentleman now living in this country, when a boy in his native land was sick with consumption, as decided by his physicians. Some friends living in Paris where Hahemann was in practice then, prevailed upon the parents to send their son of eleven years to Paris to consult the great healer. He had been in bed for weeks, and had to go by stage coach to London. A leading physician of that city examined him and decided it very presumptuous to continue the journey, as the patient could not survive it. However, the patient survived the effort, and was placed under Hahnemann's treatment. He was one hour and a half in making the first examination, and with one of his characteristic smiles told the patient he would get well. He remained under his treatment the greater part of a year and was sent home well and no charge made. The patient's account of the great physician and his

feeling of respect for him in his intelligent relation of the matter made it a very interesting incident of the session. It will be published in the proceedings.

In the election of president the disposition was to choose one of the best workers in the profession. The choice was between Dr. E. B. Nash of New York, and Dr. C. M. Boger of West Virginia. The elder of the two was elected. Dr. Nash has published some of the best, clean-cut brochures on American Homeopathics. Dr. Boger is about to publish Benninghausen's Characteristics and Repertory, which the profession most certainly want. All expressed it that the meeting of the I. H. A. was a great success. In addition to your correspondent, Minnesota was represented by Dr. Alex. Donald of St. Paul. The next meeting will be held in Boston or vicinity.

Yours fraternally,

W. H. Leonard.

SELECTIONS.

Walking as an Exercise.

The Latin advice, "*Post coenam stabis seu passus mille meabis*," I modify by resting after every meal. It is pernicious to strain an overloaded stomach, and I would rather go without food than without walk. Obstacles increase the pleasure, vexations cannot dampen the ardor for the luxury I covet most. Rain or shine, in every degree of heat or cold, I go, when feasible, several hours a day,—twice as long when my spirits are depressed. In warm weather it may increase perspiration, but that is a discomfort which must willingly be borne. H. W. Beecher said: "There are many troubles which you cannot cure by the Bible or hymn book, but which you can cure by perspiration and fresh air." External gymnasiums are scarce; golf and most other outdoor plays require some exertion of the brain. But when we walk we can give the mind a complete rest, and graduate our effort according to our strength. Let those who are feeble walk, at an easy gait, half a mile,—when their muscles strengthen, a mile,—and they will soon find the exercise a pleasure instead of a penance; it will dispel the gloom which they hugged, and their aches will vanish. Air is man's element; he has no more excuse to refrain from walking through it than a fish would have from swimming in water.—From American Monthly Review of Reviews.

Methylene Blue in Gynecology.

Chaleux Vivie and Kohler, after an extensive experience with methylene blue in various gynecologic affections; such as chronic endometritis,

metritis, parametritis, leucorrhea, vaginitis, menstrual disorders, etc., conclude their observations as follows:

1. Methylene blue (medicinal) when it is employed in concentrated solution, or, still better, in the form of powder, is an important therapeutic agent in the treatment of metritis—painless, noncaustic and non-toxic.

2. It stops very rapidly metrorrhagia and menorrhagia.

3. It diminishes leucorrheal discharges.

4. It sometimes diminishes or completely suppresses pain due to the various gynecologic troubles.

5. This anesthetic action is especially noticeable in dysmenorrhea accompanied by an alteration of the uterine mucosa.

6. Affections of the adnexa and of the parametrium are very favorably influenced by the treatment with methylene blue (medicinal).

Methylene Blue in Malaria.

Ivanhoff has found that methylene blue is as surely specific in malaria as is quinin, but that its effects are less rapidly produced. It is curative in those cases not amenable to quinin, especially in the tertian variety of the disease. The methylene blue destroys the protoplasm of the plasmodia without affecting the pigment. It also exerts a beneficent influence upon the nervous phenomena accompanying malaria.

Resolutions on Tuberculosis by British Congress of Tuberculosis.

The following resolutions were unanimously adopted by the British Congress on Tuberculosis at its recent meeting in London, Eng.:

1. Tuberculosis sputum is the main agent for the conveyance of the virus of tuberculosis from man to man. Indiscriminate spitting should therefore be suppressed.

2. All hospitals and dispensaries should present every out-patient with a leaflet on the prevention of consumption, and insist on the use of a pocket spittoon.

3. Notification of tuberculosis should be established, when possible. If compulsory notification is impracticable, voluntary should be encouraged.

4. The provision of sanatoriums is an indispensable part of measures for the diminution of tuberculosis.

5. Medical officers of health should use all their powers and relax no effort to prevent the spread of tuberculosis by milk and meat.

6. In view of the doubts thrown on the identity of human and bo-

vine tuberculosis, the government is requested to institute an inquiry into the subject.

7. Educational efforts of the great national societies for the prevention of tuberculosis are deserving of support.

8. A permanent international committee should be appointed to report on the measures for the prevention of tuberculosis in different countries.

9. Overcrowding and defective ventilation, damp and unsanitary dwellings of the working classes diminish the chances of curing consumption, and are predisposing causes of the disease.

10. The attention of governments and charitable persons should be called to the necessity for establishing antituberculosis dispensaries.

Tuberculin in Syphilis and Tuberculosis.

Otis* collected thirty-six cases of syphilis in which the tuberculin test was employed to determine its effects in the disease. A positive reaction was obtained in 17 per cent. He also reports the result of his experience with tuberculin as a test in twenty-six cases of supposed or proved tuberculosis. In eight cases of undoubted tuberculosis, four reacted and four gave negative results. Of three cases in which tubercule bacilli were found in the sputum, only one gave the reaction. Of the remaining cases of suspected tuberculosis, twelve failed to react. One case, that of a chronic laryngitis, which could either have been syphilitic or tuberculous, gave a reaction, which still left the diagnosis in doubt. The author insists that in using tuberculin for diagnostic purposes, its reaction in syphilis should be borne in mind.

The Cure and Prevention of Scarlet Fever by the use of Diphtheria Antitoxin.

C. H. Dalton says that two years ago he accidentally discovered that diphtheria antitoxin was an excellent remedy in the treatment of scarlet fever, and later investigation proved that it was equally as efficacious in the prevention of the disease. He has now tried it in a large number of cases, so many, in fact, that he must conclude that it is a sovereign remedy in the treatment and prevention of the disease. He has used antitoxin in over thirty cases since, and has immunized the other children in the families. None of them had the disease. None of the patients died, and a number of them had the disease in a severe form. A fact which impressed him particularly was the mild form assumed after the use of antitoxin in a number of cases which were running a severe

course. It is in the bounds of possibility that, if he had not used the antitoxin, the patients would have gotten along just as well and none of the other children would have taken the disease, but, in view of the large number of children involved and the contagious nature of the disease, it seems that it is highly improbable.—*St. Louis Medical Reviews.*

Calmette's Personal Experience with Antivenene.

Calmette, director of the Pasteur Institute at Lille and discoverer of antivenomous serum, antidotal to snake bite, recently had occasion to test the efficacy of this serum upon himself. While working with the venomous reptiles not long since one of them bit him. He immediately gave himself a hypodermic dose of the antivenene, which was followed by prompt recovery.

Measles Complicated with Diphtheria.

According to the statistics of the South Department of the Boston City Hospital measles are not uncommonly complicated by diphtheria. When the two diseases coexist, the prognosis is rendered much more grave, the mortality being given as 34 per cent as against 13 per cent in simple diphtheria. The earlier the complication arises, the more serious it is. As soon as this presence of diphtheria is suspected antitoxin should be freely administered, without waiting for a bacteriologic examination.

Tuberculosis Commission.

King Edward has appointed a commission to investigate Prof. Koch's theory as to the nontransmissibility of bovine and human tuberculosis. The scope of the inquiry is officially said to be whether animal and human tuberculosis are identical, whether animals and humans can be reciprocally infected and under what conditions, if at all, transmission to man occurs and the means of combating it. The commissioners are Sir Micheal Foster, secretary of the Royal society; Dr. Sims Woodhead, professor of pathology, Cambridge university; Dr. Harris Cox Martin, Prof. J. McFadyean and Prof. R. W. Boyce.

Tuberculin Reaction in Cattle.

Mischkin as a result of the application of the tuberculin test in three hundred heads of cattle, concludes that those animals are nontubercular which do not show a maximum temperature exceeding 39.6 degrees, C., in response to the test. In his observations, all those showing a rise in temperature to 40 degrees C., proved tuberculous; eight out of nine

with a maximum temperature of 39.9 degrees, five out of six with a maximum temperature of 39.8 degrees and out of three with a maximum temperature of 39.7 degrees C., two proved tuberculous. Of five cattle with a maximum temperature of 39.6 degrees, C., all proved to be non-tubercular.

Suppuration without Bacteria.

According to Kreibach, it is plainly established by recent experiments that suppuration may occur as a result of chemical irritation without the presence of bacteria. He experimentally used sterile croton oil injection in a number of men affected with eczema and obtained abscesses without bacteria in sixty-one cases and with cocci in only six cases. He claims that nonbacterial suppuration may occur in man under normal circumstances, and that the serous effusion in blebs and bullae frequently become purulent without bacteria.

Differential Diagnosis of Variola and Varicella.

Secord gives the following differential diagnosis of variola and varicella:

VARIOLA.

1. Has a distinct period of invasion before rash appears.
2. Rash is regularly papular, vesicular and pustular, latter stage longest.
3. Although papules on legs may be even a day or so behind those on face, distinct crops do not occur.
4. Rash starts on face and arms.
5. Age no influence.
6. Course of individual papule takes fully a week or ten days before dessication and crust formation.
7. Recent vaccination or preceding variola preventive.
8. Umbilication distinct. Occurs in large number of the pocks.
9. Vaccinia cannot be produced after rash has occurred.
10. In anything but mildest attack constitutional disturbance quite marked.
11. Numerous red scars left.

VARICELLA.

1. Rash appears on first day.
2. Rash is chiefly vesicular. If pustular this feature is not prominent.
3. Distinct crops, so that on fourth to fifth day all stages may be seen up to crust formation.

4. Rash generally appears on trunk.
5. Most frequently in children. Thomas, of Leipzig, says he never saw an adult suffer from varicella.
6. Dessication and crust formation by third or fourth day.
7. Recent vaccination or preceding variola no influence.
8. Umbilication absent or only in a few pocks.
9. Vaccinia can be produced.
10. Constitutional disturbance unimportant.
11. Few or no red scars.

Adrenal Extract in Gonorrhea.

Dr. Geo. O. Jarvis* has employed suprarenal extract in the treatment of gonorrhea with promising results. He used it as an injection in the following combination, the cresol being added as a preservative.

℞ Adrenal extract.....3 ij 8|0
 Cresolm. v-x|3 to .6
 Water and glycerin.....3 j 30|0

M. Sig.: Use as directed.

**International Mag.*

The Old Oaken Bucket—A Hygienic View.

With what anguish of mind I remember my childhood,
 Recalled in the light of a knowledge since gained.
 The malarious farm, the wet fungus-grown wildwood,
 The chills then contracted that since have remained;
 The scum-covered duck-pond, the pig-sty close by it,
 The ditch where the sour-smelling house drainage fell,
 The damp, shaded dwelling, the foul barnyard nigh it—
 But worse than all else was that terrible well,
 And the old oaken bucket, the mold-crusted bucket,
 The moss-covered bucket that hung in the well.

Just think of it! Moss on the vessel that lifted
 The water I drank in the days called to mind;
 Ere I knew what professors and scientists gifted
 In the waters of wells by analysis find;
 The rotting wood fiber, the oxid of iron,
 The algæ, the frog of unusual size,

The water, impure as the verses of Byron,
Are things I remember with tears in my eyes.

And to tell the sad truth—tho' I shudder to think it—
I considered that water uncommonly dear,
And often at noon, when I went there to drink it,
I enjoyed it as much as I now enjoy beer.
How ardent I seized it with hands that were grimy,
And quick to the mud-covered bottom it fell,
Then reeking with nitrites and nitrates, and slimy
With matter organic it rose from the well.

Oh, had I but realized in time to avoid them—
The dangers that lurked in that pestilent draft—
I'd have tested for organic germs and destroyed them—
With potassic permanganate ere I had quaffed.
Or perchance I'd have boiled it, and afterward strained it
Through filters of charcoal and gravel combined;
Or, after distilling, condensed, and regained it
In potable form, with its filth left behind.

How little I knew of the enteric fever
Which lurked in the water I ventured to drink,
But since I've become a devoted believer
In the teachings of science, I shudder to think.
And now, far removed from the scene I'm describing,
The story of warning to others I tell.
As memory reverts to my youthful imbibing
And I gag at the thought of that horrible well,
And the old oaken bucket, the fungus-grown bucket—
In fact, the slop bucket—that hung in the well.

—J. C. Bayles.

The Country Doctor.

"The popular conception of a country doctor is ludicrously wide of the mark, at least as far as this State is concerned," said a man who sells surgical instruments, and spends a good deal of time with the rural trade. "It is based on novels mainly, where the rustic practitioner is generally pictured as a half-starved martyr to duty, who either drives about in a ramshackle gig or rides a 'gaunt gray mare,' with his medicines in a pair of saddlebags. The doctor's old gray mare, as I re-

member her, is quite a standard character in fiction. This doleful portrait may be true of other localities," the instrument man went on, "but it certainly isn't true of Louisiana, and especially south Louisiana. The average country doctor of that section is far more prosperous than the average doctor in a city. I know at least half a dozen who earn fully \$10,000 a year, and a \$5,000 practice is comparatively common. This is not mere guessing, but I speak from a personal knowledge of the facts, gleaned in the course of long business relations. To be sure, it takes hard work to earn such sums. One physician of my acquaintance, who lives forty miles from a railroad, uses eight horses in making the rounds of his patients. He keeps several at points remote from his home, as relays. Often he is on the go for two or three days for a stretch, but he is healthy and happy in spite of the strain, and last year he collected \$9,200 cash. He expects to keep up this pace for six or eight years, and then take a young partner and gradually retire from active life. That is the plan of most of our successful country doctors, and it has made fine openings for many bright graduates from the medical colleges. I have noticed, incidentally, that the country doctor usually retires at an earlier age than the city man, and is able to enjoy life before he becomes decrepit. One great advantage of a rural practice is that there are comparatively few bad bills—exactly the reverse of the conditions in a city. When a farmer sends for a physician he pays him. A customer of mine in one of the river parishes lost only four accounts last year out of a total of over \$6,000. If you are looking for medical starvelings," added the instrument man, "you'll have to go to town to find them. The country is not their habitat—except in stories."—New Orleans Times-Democrat.

This is just as true in the Northwest as it is in the South. The country doctors are the ones who make money, save money and spend money.

Mr. Dooley's Visit to a Medical Society Meeting.

Well, afther a long innin' on diphthery, one docther gets up an' rades off a paper all about how some animal called a sarkooma gets on a woman an' is loike t' kill her, whin he, brave man, takes a 'lecthric light carbon an' puts in th' Virginia, an' so burns th' baste out. "Fwhat's th' Virginia?" says I to Doc. "Luk in yer jography, ye innocent bachelor," says he. Will, afther th' woman was saved from th' sarkooma ('twas too bad) she takes down wid cancer and doies. 'Twas discouragin' t' th' docthor. Afther he'd finished, they called on a foine, bloomin' docthoress, wid thray pigeons in her bannet (which, mark yez,

Donohue, is a sign av distinction), an' she says (after throwin' a few bookays, like, at th' presidint), that she is too tender-hearted t' use 'lecthric wires on pape, so she always sends her 'lecthric work out an' has it done be th' day. Thin a big man wid a smooth head rades off a paper too, an' 'twas a moity foine paper too, for before he got through, two or three av th' docthoresses was so overcome be th' illoquence av th' man, that they fill asleep. Thin th' presidint says he wants a big attendance nixt toime, as he ixpicted some big guns av docthors t' be there from Cincinnati. It must be turr'bly dhry wur'rk radin' all thim papers, Donohue, fur after th' matin' was over, me an' Doc shtopped in down sthairs fur a shmoile, an' bedad, if there wasn't half th' shpeak-ers av th' av'nin shmoilin', too. Which proves t' ye, Donohue, thot a midical sassiety matin' 's a good place t' go to.—Chicago Medical Times.

Vomiting after coughing is generally due to mechanical disturbance of the stomach induced by the violent effort. In such a case let the patient eat but a moderate quantity at a time, and rest quietly after dinner.

The juice of the pineapple is an excellent remedy in the treatment of diphtheria. It is given ad libitum, slowly swallowed, and continued until the exudate is destroyed.

Banana flour has lately begun to be used in making cakes, bread and biscuits. It is also used as a children's food, and for dyspeptics. In the making of beer, it is claimed that it can be advantageously used in place of barley.

For pityriasis versicolor first wash the part with warm water and soap. Then apply a solution of the hyposulphite of soda, one dram to the ounce.

In palpitation from whatever cause small doses of cactus grandiflorus, frequently repeated, will seldom fail to give relief.

Living in the open air all day, and free ventilation of the sleeping room at night, will do much to promote sleep in insomnia.

Dr. Raneletti recommends formalin in moist gangrene in order to prevent mummification and loss of tissue.

Rubber goods hardened by age may be softened and nicely restored by soaking in dilute ammonia water.

For night sweats tr. hydrastis Canadensis, from five to twenty-drop doses, has proved valuable.

Soak a blood stain in kerosene and wash out with warm water after it has stood a while.

A Georgia coroner's jury brought in the following verdict recently: "The deceased came to his death from a railroad in the hands of a receiver, and the same is manslaughter in the first degree."

Bromide of iron is a most valuable remedy for chronic catarrh.

MINNEAPOLIS HOMOEOPATHIC MAGAZINE.

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EDITORIAL.

Occupation and Long Life.

An English physician, after years of close study of the subject, has published some statistics on longevity that are interesting and instructive.

He has reached the conclusion that the rich and indolent people are the shortest lived of all classes. And he follows up this rather unusual statement with the assertion that the cause for this, paradoxical as it may seem, lies in the fact that rich people worry themselves to death.

In his list showing the relative length of life in various occupations the statistician shows that the farmer lives longer than any other worker. His is about the healthiest occupation; long hours and hard work in the open air, good digestion and a healthy appetite give him a strong frame and the good red blood that are characteristic of his kind.

The clerical life is next in order, the clergymen in the country leading a life of outdoor freedom in many instances that compares favorably with that of the farmer. He must of necessity keep regular hours and lead a life of temperance and unworldliness where his pleasures are concerned.

The lawyer is next in the list, but because of strenuous brain work, high nervous tension and life of excitement, his number of days is not so extended as that of the other two professions.

Of clergymen, lawyers and doctors, we are told that the last named can calculate on the shortest life. A physician, to be a success and follow his calling conscientiously, must be the most self-sacrificing, self-denying man among all others. His time, his very life and thoughts, are not his own. He lives under no system of regularity, he is subject at all times to journeys in any kind of weather, and his rest and comfort are points not to be considered when he is needed. The conscientious physician is one of the heroes whom the world must ever recognize, and his life is a sacrifice to the needs of others. The life of the men of medicine is so strenuous that as a class of people given to suicide they rank next to artists. Insanity is a great enemy to physicians' lives.

The political boss, the ward heeler and the office-seeker may or may not be included in the statement that "politics is one of the most healthy of occupations." Dr. Arlidge, the compiler of these statistics, points out Beaconsfield, Gladstone, Bismarck and Thiers in proof of this statement.

Activity of the mind along literary lines is conducive to long life, the great brain workers, such as writers, scientists, teachers and professors, being notoriously long lived. Mental activity bent in the right direction and after a judicious fashion brings about an ideal condition of health.

Heads of large corporations and employers of labor are subject to heart affections, nervous complaints, apoplexy and consumption, and so their lives are continually threatened and materially shortened.

The commercial traveler, with hasty and irregular meals, generally poorly cooked, has added to his uncertain habits of living a menace to life that is a grave one, and his days on earth are necessarily considerably shortened. Policemen and mail carriers come high up in the scale of long-lived people, and strange to say, the miner, with his pitiful life of darkness, shut away in the coal pits for hours at a time, often lives to a green old age.

That Anti-Vaccination Debate.

The recent largiloquent battle which was recently "pulled off" in St. Paul between Drs. J. M. Hall and J. Ohage, of the pro-vaccination forces, and Dr. Wm. B. Clarke, of the antis, seems to have stirred up medical circles more than seems to have been anticipated. The *St. Paul Medical Journal*, the official organ of the Ramsey County Allopaths and which poses as the exponent of all that is good and holy in "Regularism," regrets that Drs. Hall and Ohage were led into the debate. There is such an absence of the exultant shout of victory in the editor's comments that we suspect our saintly editor looks upon the result of the debate as a defeat for the pros.

The Medical Magazine, the official organ of the Wisconsin Homœopaths and edited by our friend Harvey B. Dale, contains the following comment:

"The debate between the anti-vaccinationists and the health officers of St. Paul and Minneapolis, was held not long ago in the principal opera house of St. Paul and proved to be both interesting and amusing. The house was packed and for nearly three hours the fight went on. Modern statistics and indisputable facts of our health officers were put up in overwhelming evidence against the ancient statistics and senseless harangue of their opponent who seemed fighting for time, as he shouted his inarticulate vaporings to his stormers in the gallery. Such argument no longer has any weight with the intelligent and we are glad to say, that now days, facts must be put in a logical manner to be convincing and we no longer consider one who brow-beats and maligns his opponent."

This is one of the most non-committal criticisms we ever read—who is Dale (or his correspondent) trying to hit? To those who know Dr. Clarke, the idea of his shouting to the gallery and trying to brow-beat and malign such a man as Ohage is ridiculous enough to excite the risibilities.

In the *Wisconsin Medical Recorder*, Dr. H. Speier, editor of the "Rundschau" department, comments thusly:

"The vigorous campaign against smallpox carried on by the health authorities of the state of Minnesota has stirred up a good deal of opposition throughout the state. The anti-vaccinationists displayed considerable activity and succeeded recently in inveigling the health officers of St. Paul and Minneapolis to meet them in public debate. The outcome was just what was to be expected, if not a defeat, certainly not a victory for rational medicine. The side of the anti's was presented by a medical man from Indiana, of about the same standing in the profession, as Wisconsin's pride, Dr. Rodermund. To carry on logical discussion with such persons is impossible. Their misstatements, garbled statistics, false conclusions can only be met by flat contradiction. They are like the proverbial Irishman's flea. The audience at such a public debate is largely made up of prejudiced fanatics, the newspaper reports are incomplete and incorrect and as a final result probably more harm is done than good. The regular profession should avoid such pitfalls."

Much to my regret I did not get to hear this debate and from what I can glean from participants and auditors the subject is not settled yet. Both sides claim the victory and those who are unbiased have called it a drawn game. Those who speak for the pros have evidently under-rated Dr. Clarke; he is neither a fool nor a knave, but a physician of liberal education and of good repute in his own home. Because he has views of

his own on matters of vaccination and has the courage to publicly espouse his cause does not make him a crank or a Rodermund. Dr. Clarke has very, very good men in this world who are keeping him company.

One thing is certain, however, the vaccination people should discard all their statistics prior to 1895 and the antis should forget all harm done in the world during past years by ignorant vaccinators using unclean virus. Let new records be kept and if after a reasonable time it be proven that the world is benefited by vaccination let the practice be adopted and if the benefits be not proven let the practice be abandoned.—P.

The Physician's and Surgeon's Fee.

The fee of the physician or surgeon has more than once proven an enigma to the young man just entering the profession and who is somewhat at a loss as to how to place a value upon his services. Then, too, many members of the general public who receive a doctor's bill cannot comprehend the process whereby the amount due is figured out. In many instances custom has settled the question as to the value of most of the ordinary services, but custom is not always a fair judge. For instance, it is a mystery to me why a country visit in my end of the county is worth only fifty cents a mile, while in the eastern end of the county, twenty miles away, the same services are worth one dollar per mile. Or why an oculist in Indianapolis should get three hundred dollars for a cataract operation and ten dollars for fitting glasses while the oculist in Minneapolis gets one hundred dollars for the cataract operation and fifteen dollars for fitting glasses. Yet such things "do be."

The physician's fee should be estimated upon three items,—the work done, the knowing how to do the work and the risks assumed in doing the work. It is manifest that in a case requiring an hour of time for treatment the fee should be larger than in one of a similar nature, but only requiring a few minutes time. The first visit or examination in a chronic case requires a great deal more labor and time than the subsequent ones, and is therefore worth more. This is equally true in acute diseases, but the larger fee is rarely charged and less oftener paid.

Cases demanding unusual physical strain or exertion upon the part of the physician or surgeon should afford better compensation than the ordinary run of work. Likewise where it is necessary to devote extra time to the special study of some obscure case. No physician can carry all the indications for all the remedies in his memory, and any call upon his brain for overtime should be met by a compensating fee.

The "knowing how," the ability to do, involves special education of the brain and hand, a special adaptability for the work and a special

equipment enabling the worker to make all necessary examinations and to carry out the indicated treatments. Education of the brain costs time and money, and the better the quality of the education the greater the cost. Education embraces experience, and experience, if in the right lines, is valuable and usually costs the physician much besides his time. Education of the hand requires time, practice and perseverance, all expensive articles in the world's economy. Special adaptability is one of Nature's gifts and the individual who can secure the services of a physician or surgeon who is a "natural born" practitioner of the healing art should feel sufficiently elated over his good fortune to recognize the aptness of the divine saying, "The physician is worthy of his hire."

The special equipment, the therapeutic and surgical armamentarium with which the fight against disease and death is carried on, is a matter of great expense to the worker, and it is only just that each beneficiary of the equipment should bear a portion of the expense necessary to its maintenance. The instruments used in lancing an abscess are not as expensive as those used in an amputation or a laparotomy, hence the subjects of the latter operations may expect to bear a larger proportionate share of the expenses of the equipment. Where specially made instruments are needed for individual cases the total expense of such instruments should be borne by the patient. The possible future use of such instruments is a conjecture which the surgeon can not figure upon and a risk which he cannot assume. This rule holds good in all cases where instruments are injured or destroyed by mentally incompetent patients or through the carelessness or neglect of sane patients.

The risks assumed by the physician and surgeon in taking a case for treatment are varied, and, like the risks in other occupations, must be taken into consideration in estimating the compensation. Even though the actual labor involved be no greater than in the simplest cases there are instances where the risk involved is sufficient to demand a much greater fee. The dangers of infection and contagion are elements to be considered in the practice of medicine and surgery. Many who do not understand think it is wonderful that physicians do not "catch" contagious diseases. They do not know the precautions taken by physicians to protect themselves, their families and others, and even when advised of these precautions often neglect to observe them. 'Tis true that familiarity with disease and a knowledge of how to combat it have developed in many physicians a psychic equanimity which in a measure protects them from the invasion of germs, but which personal immunity does not release the physician from observing those precautions necessary for the protection of others. This protection of the public entails an expense of time, labor and money for which the physician has a just right to claim

additional pay. In many cases coming under the physician's care, especially in insane and delirious patients, there is an element of personal injury, a risk which relatives and friends are usually perfectly willing to shove off upon the physician—and for which shoving they should pay. The dangers of septic or blood poisoning are such as to demand recognition.

Every case coming under the care of a physician or surgeon brings with it the possibility of failure, and failure means disappointment, dissatisfaction, chagrin and the possible exhibition of resentment on the part of the patient or his relatives and dependents. This resentment often takes the form of a refusal to pay for the services rendered, a civil suit for malpractice, or even a criminal prosecution. Such incidents in the career of a physician or surgeon are costly and their possibility can only be equalized by considering this element of risk in estimating the fee. Should the character of the case, or the patient, or relatives and dependents be such as to favor the prospects of liquidation it is better to absolutely refuse to accept the case,—a procedure which the courts have sustained as a legitimate one. In America the victim of a resentful patient or a lawyer's malpractice suit has no adequate redress.

Every case which terminates unfavorably, or rather which does not terminate favorably, for some cases refuse to terminate in any way, subjects the attending physician or surgeon to more or less loss of reputation. In the practice of medicine and surgery the practitioner's reputation is his most valuable asset, and yet so frail is its structure that the failure of one day destroys the work of years in upbuilding. The greater the man's reputation the greater the possibilities of loss, the greater the risk involved and the greater the fee to be charged. Hence those who have labored and studied to acquire an expert or specialist's skill and reputation are entitled to and do receive larger fees than those possessing only that ordinary skill required by the law. Of recent years it has become quite the vogue to hold medical and surgical practitioners financially responsible for errors in diagnosis and treatment. This being true the practitioner is justifiable in calculating on this risk.

Another element which should enter into the calculations when estimating a fee is the value of the services to the patient, his relatives and the public at large, and yet this element is considered only in the rarely prominent cases. A man engaged in a private business involving many thousands of dollars, whose energy and ability form the real motive power of the business, should be willing to pay a larger fee than the ordinary clerk, merchant or laborer. The attorney, whose capital is his knowledge and reputation and who receives large fees for the work of his brain, should not hesitate to remunerate his medical or surgical attendant as

handsomely as he himself is remunerated. This is true of all individuals possessed of dominating brains, be they merchant princes, corporation magnates, statesmen, or leaders in whatever line of energy through which their vital powers may find an outlet. The man who is rapidly accumulating wealth for himself and his family, the man who guides the state or nation or who looks after the interests of vast amounts of capital or large numbers of laborers is of value, and to protect him from disease or to rescue him when attacked is most assuredly a service of great value to those concerned and they should gladly pay liberally the man who exerts his utmost endeavors to guard and save.

It is better to over estimate the value of your services than to under estimate. The world at large knows little of their value or the methods of computing the same, and is prone to accept the physician or surgeon at his own estimate. Should they think it too high their thoughts will soon become audible, but if the reverse they remain mute. Courts have been known to cut down a physician's bill, but never to increase one. Hence, *verbum sapienti*. Local conditions controlling the expenses of living, maintaining an office, livery equipment, etc., and the social obligations of your position in the community and the fraternity must not be overlooked. Those with whom you are associated expect you to live up to, or a little above, their standard; they should be, and as a rule are, willing to give you sufficient income to permit of your doing so.—P.

BOOKS.

A MANUAL OF LEGAL MEDICINE, by J. Austin Herald, A. M., M. D., Coroner's Physician of the city and county of New York, etc. Published by J. B. Lippincott Co., Philadelphia. Price \$4.00.

Both the medical and legal professions have needed for years a new and complete work on this subject. There are larger works on the market and many smaller manuals but there is no up-to-date text book written by a thoroughly practical man, such as the one before us.

Dr. Herald's years of experience in the coroner's office and his work as an expert in New York gave him an abundant opportunity to observe the need of just the kind of book which he has presented.

About one-fourth the volume is devoted to toxicology. In this section begins the medicinal, and popular names of the poisons with their macroscopic appearances. He also states the officinal and lethal doses of each. The symptoms, antidotes, post mortem changes and the test by which the presence of the drugs in the viscera and tissues can be de-

tected receive careful attention. He includes not only the common poisons and their alkaloids but also those less frequently used.

No other work on the market does this so well.

The balance of the book is devoted to those subjects usually to be found in works on medical jurisprudence and in addition many matters which, while of great practical importance, are usually omitted. For instance, electricity in its medico-legal bearing.

Electrocution receives careful attention and the discussion as to whether those which have taken place in New York really killed the criminal, or whether death occurred in consequence of the so-called autopsy is very interesting.

The work is timely, and those physicians and lawyers who want a clearly written and complete work on medico-legal subjects will find Dr. Herald's excellent volume just suited to their use.—A. P. W.

THE COMPOSITE MAN, AS COMPREHENDED IN FOURTEEN ANATOMICAL IMPERSONATIONS, by E. H. Pratt, A.M., M. D., L. L. D. Third Edition. The New Age Publishing Company, 100 State St. Chicago.

To those who know the genial author of *The Composite Man*, it is certainly as much a pleasure to see the success his work has encountered as it is gratifying to Dr. Pratt himself. Originally published to the medical profession, these impersonations have been recognized by others as of value, and today the book has been taken up by many schools as a text book. To meet this popular demand some slight changes have been made in the text and the physical aspect of the book has been altered to make it more of a general library book. Typographically the book has been improved. Otherwise it was excellent in its previous editions.

The Composite Man is a book upon anatomy and physiology, which presents these subjects in an altogether different style from the usual works upon these subjects. This is especially true of the chapters upon the lymphatics and sympathetic nervous systems. Dr. Pratt is to be congratulated in making clear, bright and interesting a subject which is usually dreaded and disliked by school teachers and pupils.—P.

DISEASES OF THE LUNGS, THEIR PATHOLOGY, SYMPTOMATOLOGY, DIAGNOSIS AND TREATMENT, by Ch. Gatchell, M. D. Era Publishing Co., Chicago, 1902.

In this volume Gatchell has given us some 260 pages of interesting and valuable information regarding the diseases of the lungs, arranged in a most get-atable form, calculated to be of great value to the busy practitioner or the reviewing candidate for graduation, who has not the time

to wade through pages of verbose detail. Nearly fifty pathological conditions are handled in this concise manner and while there are some departures from the usual methods followed in handling the subject, these are not so radical as to startle one, and not a few of them seem really advantageous. The doctor has appended a glossary of terms "for the convenience of the student," as he says, but which will find favor with many of the practitioners.—P.

EIGHTEENTH ANNUAL REPORT OF THE STATE BOARD OF HEALTH AND VITAL STATISTICS OF MINNESOTA.
H. M. Bracken, M. D., Secretary, St. Paul, Minn., 1901.

Besides the details of the routine work of the board, its executive officer, laboratory and veterinary department in controlling contagious diseases, water surveys and animal diseases, the report contains valuable literature upon the bacteriological aspects of diphtheria. Numerous plates illustrate the articles showing the various forms of the diphtheria bacillus which will be of much aid to the general practitioner in comprehending the work of the laboratory work done by the board.—P.

OPHTHALMIC DISEASES AND THERAPEUTICS, by A. B. Norton, M. D. Third edition, revised and enlarged. Boericke & Tafel, Philadelphia, Pa., 1902. Cloth \$3.36, half morocco \$4.36.

The name of Norton is inseparably attached to the Ophthalmic Art in Homœopathy, and the same is a warranty of goodness. The third edition of this popular work is no exception to the rule. An acceptable addition to the book is a "Clinical Index" prepared especially by Dr. Edwin S. Munson, of New York. The chapters upon the examination of the eye and refraction are especially valuable to the physician who is interested in eye work while that on Hygiene of the Eye is interesting to all and is a subject not touched upon in works of this class. There is no doubt but that Norton's Ophthalmic Diseases will continue to be the standard textbook of its class.—P.

NEWS AND NOTES.

The Minneapolis Homœopathic Medical Society meets on the second Wednesday eve of each month; Henry C. Aldrich, M. D., President; Adele S. Hutchison, M. D., Vice-President; O. K. Richardson, M. D., Secretary.

The State Medical Examining Board holds its examinations at the State Capital building in St. Paul, the first Tuesday in January, April, June and October, C. J. Ringnell, M. D., Minneapolis, Secretary. The homœopathic members are Adele S. Hutchison, M. D., Minneapolis; Thos Lowe, M. D., Slayton and A. B. Cole, M. D., Fergus Falls.

ANNOUNCEMENT.

The Sixteenth Yearly Post Graduate Course in Orificial Surgery by E. H. Pratt, M. D., will be held in the amphitheatre of the Chicago Homœopathic Medical College, corner Wood and York streets, Chicago, Illinois, during the week beginning with September 8, 1902, having a four hours' daily session.

Doctors invited to bring obstinate cases of every variety of chronic disease.

For particulars address, E. H. Pratt, M. D., 100 State Street, Suite 1203, Chicago, Illinois.

Drs. J. B. G. Custis and T. L. McDonald have been re-elected to a three years' term on the Medical Examining Board of the District of Columbia.

Dr. Frederic M. Gibson has been spending his vacation on his landed estates in the wilds of northern Minnesota near Milaca.

San Francisco has a physician whose sign says that he is a naturopath. Our old friend Arndt suggests damned-fool-path for the next departure in that line.

Dr. A. L. McNeill has removed from Epworth, Iowa, to McMinnville, Oregon.

As showing the amity existing between the two schools of medicine and the liberality (?) of the old school, we recite the facts as printed by the North American Journal of Homœopathy for June, that homœopathic graduates from reputable colleges were discourteously refused admission to the advantages of postgraduate study to be obtained at the Medical School of the University of Pennsylvania, and also a leading allopathic institution of New York City, and that because the Jamaica, N. Y., Hospital gave to homœopaths equal privileges, the gentle and tolerant allopaths resigned in a body.

Dr. Esther Hayes Young has returned from an all winter's sojourn in Pennsylvania much improved in general health and is now relocated at 2213 Central Avenue, Minneapolis.

At the June examination licenses to practice in the state were issued to Drs. E. L. Hall and Wm. B. Roberts of Minneapolis, Emma L. Scholz of Monticello and Eugene F. Warner of St. Paul.

Dr. and Mrs. C. F. Mitchell of Mound, Minn., are receiving congratulations on the advent of a little daughter at their home on July 12th.

Dr. F. C. Titzel is now senior professor of Surgery in the Hering Medical College of Chicago, and his associate is Dr. F. A. Pittenger, formerly assistant to Dr. Chas. Adams.

Dr. J. J. Thompson has accepted a position on the gynecological chair at the Chicago Homœopathic Medical College.

Dr. C. T. Hood is at the head of the chair of practice in C. H. M. C.

Dr. Geo. S. Adams, formerly at the Westboro, Mass., State Hospital for the insane, has become associated with Dr. A. J. Givens, at Stamford Hall, Stamford, Conn.

Dr. C. E. Kahlke, Chicago, is abroad doing the European hospitals.

Dr. Elias C. Price, of Baltimore, died in June last.

Dr. C. B. Adams, Sac City, Iowa, is president of the State Board of Medical Examiners.

Dr. E. B. Nash, Courtland, N. Y., is now a professor of materia medica in the N. Y. H. M. C. & H.

Dr. E. B. Lambert, Port Jervis, N. Y., is a member of the Board of Visitors of the State Hospital at Middletown.

Dr. T. Griswold Comstock, of St. Louis, Mo., is the possessor of a photograph of himself and Dr. Wm. Tod Helmuth, taken forty-two years ago.

The University of Michigan Homœopathic Department graduated a class of seven on June 19th.

Dr. E. G. Bodenbender, Buffalo, N. Y., has been appointed a district physician to the poor by the city authorities.

At the May examination of the California State Board of Medical Examiners, no homœopaths presented themselves and of the thirty allopaths ten were rejected, all failing on pathology.

Over \$50,000 has been raised for the Hahnemann Hospital in San Francisco.

The N. Y. H. M. C. & H., has reorganized its faculty. The chair of surgery has the younger Helmuth at its head and he is assisted by Drs. C. L. Bagg, W. H. Bishopp, Geo. W. Roberts and Bukk G. Carleton. Dr. A. B. Norton is at the head of the ophthalmological department, St. Clair Smith of materia medica, assisted by E. B. Nash, of "Leaders" fame and E. Carleton who will lecture on the philosophy of homœopathy. Dr. Wm. H. King is dean and Dr. Geo. W. Roberts secretary of the faculty.

Dr. C. H. Coggsell after seventeen years' service has resigned from the faculty of the Homœopathic College of Iowa University and has been made emeritus professor of obstetrics. Dr. Fred Becker has resigned

from the chair of practice and has been succeeded by his assistant Dr. B. L. Johnson. Dr. F. J. Becker has been elected professor of gynecology and obstetrics, Dr. W. L. Bywater has been appointed lecturer on physical diagnosis and lung diseases and Dr. T. L. Hazzard, former assistant in materia medica, has been appointed lecturer on pedology.

Five thousand five hundred medical degrees have been granted the past year.

Dr. Emily Dunning is the first woman physician on the ambulance corps in N. Y. City.

A Mexican woman in El Paso, Texas, has given birth to a healthy living child six weeks after having been delivered of a normal child at term.

ORIFICIAL SURGERY.

The fifteen annual meeting of the American Association of Orifical Surgeons will be held in Chicago, September 10th and 11th, 1902. A program is being made up of lectures and papers by the leading specialists and practitioners in rectal, genito-urinary and gynecological work, and in the treatment of all chronic diseases. The orifical surgeons are the workers in the great field of the reflexes and the profession generally is every day being brought closer to a realization of the fact that the reflexes play a most important part in the chronic manifestations of disease. Papers and discussions will cover the entire scope of the work, preparatory, operative and therapeutic, and the sessions will be of great benefit to all who attend. H. C. Aldrich, M. D., of Minneapolis, Minn., President; Ralph St. J. Perry, M. D., Secretary, Farmington, Minn.

We are pleased to report that Dr. W. H. Caine is slightly improved.

Dr. Cora Smith Eaton recently went through the Yellowstone Park and reports an enjoyable time.

Dr. V. H. Hallman of Little Rock, Arkansas, is Grand Chancellor of the Knights of Pythias, of that state.

Drs. A. P. and S. P. Hedges have accepted chairs on the faculty of the C. H. M. C.

Dr. W. E. Fruitt has been elected secretary of the faculty of C. H. M. C.

Drs. S. F. Wilcox, F. H. Boynton and Geo. M. Dillon have retired from the faculty of the N. Y. H. M. C. & H.

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How the Sick Are Cured.

D. H. ROBERTS, M. D.,

OWATONNA, MINN.

I have just been reading the leading article in the July number of this magazine, written by our esteemed friend and brother Dr. Pratt of Chicago. I can appreciate the desire he expresses that his views should be discussed; but how we are to carry on a profitable discussion without either debate or argument, does not appear very clear to me. I suppose if any of us have views that differ from his he would have us discuss the matter altogether, or chiefly, anyway, by *suggestion*. Not having been accustomed to such limitations if I do make some blunders I hope the Dr. will excuse me.

While I freely admit the importance of the question whether curative motions are in their nature intrinsically vibratory, undulatory, oscillatory, or as the negro said, "wabbletory," or even just *circulatory*, I feel more interested for the present in the main issue—the *curative power of suggestion*. Dr. Pratt has certainly given us some very good suggestions about the quality, power and scope of suggestion. They remind me of a case I had a good many years ago.

It was the 23rd day of January, 1869, that I first saw John H——. He was a young man, about 25 years of age, and had been lying upon his bed more than four years and, for the last twelve months, had been unable to move either hand or foot. I was informed that his sickness was brought upon him by over-exertion. He had worked in the harvest field, binding wheat, all day and in the evening walked home, a distance of over 20 miles, which was too much for him, and the next day he was sick and unable to rise from his bed.

He had had many doctors and had taken a great deal of medicine but all to no purpose. He continued to grow weaker and thinner and more helpless until now, and for the past year, he could only move his head a very little by rolling it upon the pillow, and could only speak a few words at a time in a very feeble voice. His physicians had early diagnosed "heart disease" and suggested to him that any extra exertion might be at the risk of his life.

I considered this *suggestion* more responsible for his present wretched condition than any physical trouble with his heart. To my mind the case seemed to be, possibly, a curable one though certainly of very doubtful appearance. What was to be done? If my faith in the dynamic or spiritual power of highly potertized drugs had been sufficient I might have given him one dose of the two hundred thousandth potency of the indicated remedy and then have patiently waited for the result. Perhaps, however, in the meantime giving an occasional palliative dose of some medicine in a low potency so that it would not interfere with the one powerful *dynamic* dose. But my faith was too weak. I heard of very few homeopaths in that day who accepted the dynamic theory of drugs and the seeming unreasonableness of the doctrine was, to my mind, sufficient for the exclusion of high potencies in a case like that. I was a strict homeopath and believed in the *law of similars*, but for curative remedies I relied upon the lower potencies.

My patient was a skeleton—just skin and bone. What a glorious opportunity to build him up with *tissue remedies*! Certainly they were, nearly or quite all of them, well indicated. But, at that time, Schuessler had not given to the world his wonderful system that cures all diseases, with only 12 remedies, by tissue feeding. So I lost my opportunity in that direction. I might have given him whiskey or beer, or cod-liver-oil with beef's blood and pepsin, of course; but I was a homeopath and those things savored too much of allopathy. So, as a tissue feeder and up-builder, I simply allowed him to have whatever *food* he desired, provided it was of a light and digestible character.

The *osteopathic* system of cure was not born until long after that date so I never thought of the possibility of there being bones, veins, tendons, nerves and other tissues out of place as the cause of his sickness. Pockets and papilla were almost unheard of or, at any rate, they were never suspected of having any malicious intent. So I never examined his rectum at all. Nothing seemed to be known about massage, at least by that name, but bathing, gentle movements, rubbing and pure air and sunshine were considered very important. I, therefore, gave directions to the family that the patient should have sponge baths with warm water containing a little soda; and that he should be gently rubbed and his limbs

moved about several times every day. I cautioned them, however, to be very careful not to let any of the bones fall out of place while they were handling them; and I directed very positively that the patient should, while his limbs were being manipulated, make strenuous efforts to help himself. I also gave directions for pure air and sunshine, and explained the advantages of deep breathing.

In those days *suggestion* as a curative agent was not much talked about, but I believe homeopathic physicians generally had more or less faith in it and used it as occasion seemed to require. As for myself I considered suggestion a very powerful curative agent, and, in this case, as much to be relied upon as the medicine itself. I knew but little about hypnotism and did not try to induce a sleeping condition for the more positive effects of my vocal suggestions. In fact, my patient was so feeble in mind as well as body that, I tried to get him as wide awake as possible while I made my suggestions to him. Then, I did not tell him that he only *believed* himself sick while, in fact, he was well and could get up and walk if he would for I knew that would be false whether, in his weak condition, he could fully realize its falsity or not. But I did tell him that I believed my treatment, if carefully persisted in, would enable him to move his hands and feet without help in a short time, and that, in about *three months* we would have him strong enough that he could walk alone.

I told him, and I told the family, that we must expect him to feel, and to appear, sometimes better and sometimes worse; but that, in the main he would improve about as I had indicated; and that we must all work together with an eye single to the one object, that of having him *walk alone* by the last of April. The patient was two miles out of town and my visits, afterward, were made as much to cheer him up and to encourage him as anything else. He did improve and gradually began to move his hands and his feet without help. Before the winter was fairly gone he could feed himself—could turn the leaves of a book and look at the pictures and even draw and write a little. About the middle of April he wrote me a letter which, I remember, commenced in this way: "Dear Dr. I have walked and I walked like a calf that had just been born."

I hastened out to see him and, after very careful and thorough examination, I told him, and the family, that everything was working right and that I now thought we would have him able to sit upright in a buggy and *ride to town* on the Fourth day of July. That we would continue the treatment with patience and perseverance and with that object constantly in mind. Early in the morning on the Fourth of July he came to town. He stood the ride well, but he was still very thin. He weighed less than 100 lbs. and looked very much like a walking skeleton.

At that time I, myself, weighed about 160 lbs. I told him that I would now make another prediction; I would predict that by the next Christmas he would *weigh as much as I*. And that we would continue the treatment with that object in view. On Christmas day he came to town, and when we were weighed he was found to be two pounds heavier than I. He was a well man.

In those early days the spiritual nature of man, as so graphically depicted by Dr. Pratt, seemed to be fully realized by homeopathic physicians generally. They also recognized the fact that the vital forces of the system were always in the effort to save life and to cure disease, and that the similar remedy in small, but appreciable doses, often repeated, would stimulate those vital forces into greater curative activity, and thus assist in the cure. With these ideas in mind many other things were thought of and practiced that were supposed to assist the vital forces in their curative work. A hot wet-sheet pack was often given in the commencement of a fever to assist in breaking it up. Sponge baths, friction of the skin, movement of the limbs and manipulation of the muscles, were considered almost, or quite, as necessary as the medicine. They all stimulated and assisted the vital or curative life forces of the patient. Wonderful cures were thus made. And, while it is true that a few dynamic theory men were sounding an alarm—claiming that Hahnemann's Organon was not taught or heard from inside the walls of our colleges and that the practice was becoming mongrel; yet, homeopathy flourished and gained a reputation and a foothold in almost every locality throughout the country.

Dr. Pratt seems to desire to bring together and harmonize all the different systems of practice. Perhaps a careful examination into the past history of homeopathy will show that at one time the greater part of the practical things advocated by any, and all, of them was actually practiced by the practitioners of homeopathy.

I would not discourage theorizing and speculating and reaching out for something new and better. But while we do so let us not forget the ideas and the practice that have proved so successful in the past.

Idiopathic or Pernicious Anaemia.

O. H. HALL, M. D.,

ST. PAUL, MINNESOTA.

Lecturer on History and Methodology of Medicine, University of Minnesota.

Idiopathic or pernicious anaemia is a form in which the diminution of red blood cells reaches an extreme degree. It occurs without adequate known cause and runs a progressive course with remissions and usually

terminates in death. The disease usually develops slowly and insidiously; the patient presenting the ordinary symptoms of anaemia, pallor, weakness, shortness of breath, palpitation, venous murmurs, loss of appetite and impaired digestion. As the disease progresses the skin becomes pale, lemon hue, weakness and dyspnoea increase, the patient has attacks of dizziness, faintness and ringing in the ears; there may be slight oedema, and hemorrhage from the nose, the bowels and into the retina occurs. The hemorrhages are small and distinct in the skin and mucous membrane. The urine is of low Sp. Gr., and usually contains an increased amount of uric acid. Under the glass will be found renal epithelium, a few casts containing blood pigment and an increased amount of iron. The bowels may be disturbed by diarrhoea. A peculiarity of this disease is an occurrence of fever of an irregular type. The temperature rarely rising higher than 102 or 103 in the evening and is followed by a morning remission. It is not usually present in the early stages of the disease, may be absent for weeks at a time, when the disease is fully developed and may cease entirely in the later stages.

In spite of the extreme exhaustion and wide-spread functional disturbance, there is no emaciation and the patient appears well nourished. The blood appears pale and watery to the naked eye; the Sp. Gr., is lowered; often being 1,028 instead of 1,055. It has been found deficient in fibrin, iron and nitrogen.

The blood changes in idiopathic anaemia are characteristic and are essential to the diagnosis of the disease. They are: 1. Very great reduction in the number of blood cells; 2. An absolute diminution in the amount of hemoglobin, but, as compared with the number of red cells, there may be a proportionate increase; 3. Considerable variation in the size of the cells, the average size of the cells probably being larger; 4. *Poikilocytosis*; 5. Nucleated red blood cells; 6. Degenerated cells.

Reduction in the number of red blood cells reaches an extremer degree than in any other disease. Cases are on record where the number was only 143,000 per cubic millimetres. The shape of the cells are altered; they are oval, elongated, bent or have projection of their substance. *Poikilocytosis*. The size of the cells varies, there are microcytes and megaloblasts, but the occurrence of a distinct proportion of large nucleated red blood cells is diagnostic of this disease. The average size of the red blood cells seems to be increased and so is the proportionate amount of hemoglobin in each cell. This latter is very characteristic symptom and the only one—according to Hunter. The leucocytes are usually diminished in number; showing a relative increase in the small mononuclear elements; while the multinuclear elements are relatively diminished; sometimes being under 50 per cent. This blood condition is not constant, but

is subject to wide variation. It has been found that in a very short time a change in the form of the blood, a formal crisis may occur. A formal overflow of the blood, with polynuclear leucocytes and nucleated red blood cells, takes place before a period of improvement. Whereas before a period where the blood becomes worse and before the final stage the blood becomes poor in leucocytes and red blood cells. The usual post mortem lesions are fatty degeneration of the heart and liver, red and lymphoid bone marrow and deposits of iron in the liver—usually in the periphery and middle zones. Hemorrhages into the skin, serous membranes and retina are found. The muscles are often a deep red and the fat throughout the body of a light yellow color. Degeneration of the posterior columns and middle tract may occur.

Peter Nyland, aet., 54 years, tramp at the time of admission into hospital, was admitted to hospital, on June 16th, 1901. Born at Philadelphia, Pa., but later moved to St. Louis and lived the greater part of the time in the South. Had two attacks of malaria, one when a boy and later when working in the swamps of Louisiana.

Three years ago was struck in the side by a hand car and three ribs on this side (the left) were fractured. Aside from these has not been ill until the present attack.

Present illness began about four weeks before admission to hospital with a severe cold and a hard cough. Had been subjected to exposure. He complains of severe cold and weakness. Some pain on urinating and tenderness at times over the abdomen. Spits up blood and has bloody stools.

Physical examination:

Patient well developed, but somewhat emaciated. Anaemic; with very little color in conjunctiva or lips. Eyes dull in expression. Reaction of pupils normal. Tongue clean but breath foul.

Chest:

Well developed. Hyperresonant over anterior surfaces. Prolonged expiratory murmur at apices, but no dullness.

Heart's action regular, but not strong. Sounds normal at valves. Anaemic murmur heard at orifices and along carotids.

Abdomen:

Spleen enlarged and palpable. Liver much enlarged and extends into center of abdomen and downward. Other abdominal viscera normal.

Amount of urine passed daily about 30 ounces. No megaloblasts found.

Diagnosis:

Pernicious anaemia—emphysema of lungs. Hypertrophied liver.

Blood counts:

June 16th, 1901,—956.250 red.

June 23rd, 1901,—847.000 red.

June 26th, 1901,—1336.120 red.

July 16th, 1901,—2400.000 red.

Oct. 9th, 1901,—1360.000 red.

Haemoglobin 20 per cent. Many poikilocytoses. No megaloblasts.

Oct. 11th, 1901. Apparently well nourished, but very weak. Blood watery in appearance. Has a troublesome diarrhoea. Difficulty in retaining stool until he reaches closet. Stool watery; at times bloody.

Oct. 13th, 1901, blood examination:

Red cells distorted in shape and size. Enlarged and horse-shoe-shaped poikilocytoses. Marked macrocytes and microcytes present. Normoblasts numerous. Megalocytes doubtful. Cereated and vacuolated red cells present. White cells apparently normal except many seen in process of disintegration. Myelocytes, lymphocytes and polynuclear neutrophiles seen.

Nov. 21st, 1901—Red blood count, 2.194.400; haemoglobin, 30 per cent.

Patient during September and October had been on ferri-peptoman-gan.

This was changed at this time to arsenated haemaboloids and Kali bichromicum given.

Dec. 12th, 1901—Red blood count, 2.144.444; white, 4.000.

Haemoglobin deficient. Megaloblasts present (state board examination). Some poikilocytes.

(Diagnosis confirmed by state board examination.)

Feb. 19th, 1902—Red count, 4.022.000.

Discharged cured Feb. 20th, 1902.

The Homœopathic Department of the Minnesota State University.

EUGENE L. MANN, A. B., M. D.,

ST. PAUL, MINN.

Prof. of Otology, Rhinology and Laryngology, University of Minnesota.

Toast Delivered at the Alumni Conclave at Cleveland, Ohio, During the Meeting of the American Institutes of Homœopathy, 1902.

From the prophets who sang in the dawn of history to the modern weather sages of St. Louis; from the sublime utterances of the Hebrew seers to the modern schoolboy's "I told you so," the prophet has always been honored, or has at least accredited honor to himself; but posterity has meted out its laurels mainly to those who, through their prophetic vision have not only looked into the future, but have so used their powers as to prepare their age for what was ahead. And as I project my sub-

conscious self into the dim vistas of the future, and, hovering over the abyss of time look back upon this fair country of ours, and see the Atlantic border alive with commercial activity and shipping energy, the regions directly west of the mountain ranges utilizing their abundant supplies of iron, coal and oil in the promotion and building of manufacturies that send their products throughout the world, and turning to the Pacific, see there built up a thriving Oriental trade that demands all the energies of the people, and just east of the Rocky Mountains the vast plains under artificial irrigation covered by diversified farms for fruit and cereals and stock raising, the market garden of the land; as this panorama presents itself to view there lies in the center a beautiful valley, watered by the grand "Father of Waters," in touch with both east and west, alive to all the energies of the vast continent, and yet apart from the bustle and care and worry of commercial life. 'Tis to this region the colleges and universities of the country have naturally and irresistibly been drawn. The educational center is no longer Boston, or New York, or Philadelphia; it is not San Francisco, nor Chicago, nor, pardon me, Cleveland, but St. Papolis, formerly, St. Paul and Minneapolis. Midway between east and west, and with a climate rigorous enough to stimulate into activity the cerebral cells and bring a smile to the face of the coal magnate. As I see all this I am filled with pride that I represent here tonight the faculty of the Homeopathic Department of the Minnesota State University.

Gentlemen, our college is small, but we are building for the future. We are laying a foundation commensurate with the size of the structure that prophetic vision shows will be built thereon. We look not with envy upon you who grace the proffesorial chairs of our eastern colleges, but we quietly and persistently labor that when posterity shall pronounce judgment upon our deeds, it shall write, "They Buildded Well." It is better to have reared an imposing structure than to bask under the electric lights of its roof-garden. We are a University Medical College. That means that our students are taught the fundamental branches in common with the older schools. I know there are those who feel that homeopathy should not thus sully her white robes; but, gentlemen, our graduates are as good homeopaths as others, and it seems to me that I hear less in these days about the Homeopath knowing nothing of anatomy, of physiology, of pathology. The grade marks of our students are above the average of the older schools in these common branches. Then the old school is not contagious. You can mix them and not contract the disease. Some of the brightest lights of our school today were brought up and nurtured in the older faith; they generally make the better homeopaths. I believe the day will come when the University Medical College will be looked upon with more favor than at present; when our practitioners will not be

afraid to send their students where they must, for the first year or two, rub up against the old school students. And, besides, homeopathy has its mission. Can the phosphate fertilize the soil if you keep it in its rock bed? Would the yeast leaven the dough if you kept it apart from the flour? God always has in training some commanding genius for the control of great crisis in the affairs of nations and peoples. Galileo was such an one; and through him the world knew of the planetary sphere; his doctrines were revolutionary; he was persecuted, and through him the truth still lived.

Columbus was such an one. When liberty was crushed to earth in the old countries, and there seemed to be no spot upon which she could grow, he discovered a new hemisphere, where liberty has outgrown the highest ideals of those times.

Morse was such an one. When business had reached its limits and was hedged in by lack of communication, he discovered the telegraph and the people wondered.

Hahnemann was such an one in medicine. Any who read of medicine in his time realizes how necessary was some revolution that medical science could advance. He was laughed at, but he still lives, and the great truths he uttered live still.

But, gentlemen, Galileo did not know all of astronomy. There have been discoverers since; they do not sully his glory, rather do they magnify the work and genius of one, who in the bedimmed light of the age in which he lived wrought out problems that made possible the astronomy of today. The Morse telegraphic code does not include Marconi's system, nor the telephone, but it made these possible. Hahnemann did not know all of medicine; I say it with all reverence, gentlemen, his work was necessary, the old regime had had its day, had done its work and failed, a revolution was necessary to clear the medical atmosphere. Hahnemann not only generated that revolution, but so laid the foundation of medical knowledge anew that the structures reared upon it by succeeding generations have stood well the winds and storms of adverse criticism. But to our college: We point with pride to the fact that we have graduated no failures. Wherever our students have taken the state examining board they have succeeded. Whenever they have sought the hospital appointments, they have secured them. They are homeopaths. They are homeopaths from conviction, not because they know no other medicine; they are broad homeopaths. Whatever tends to the healing of the sick, is theirs. The advances in medicine, in surgery, in asepsis, in serum therapy are investigated and digested. They wander through the atmosphere of medicine as the comet through the ethereal spaces, illuminating, illuminated, but ever held to its course by the influence of the gravity that emanates from the great central source of power, the sun.

Homeopathy, the sun in medicine, keeps and governs and controls them.

The Loyal Alumnus.

A. P. WILLIAMSON, A. M., M. D., LL. M.

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Homœopathic Medicine and Surgery, University of Minnesota.

President's Address before the Alumni Association of the Hahnemann
Medical College and Hospital of Philadelphia, May 15, 1902.

Loyalty is the greatest impulsive power that can sway the heart of man. It is the reality of an emotion which makes man forget self and devote the best there is in him to some cause worthy of affection. It was loyalty to justice that lead that stern old Roman judge to condemn his only son to have his eyes put out. It was loyalty to a principle that induced the Athenian nobleman to fall on his sword when he discovered that he had disobeyed a law of his own making. It was loyalty to an opinion that brought the wrath of the inquisition upon Galileo's venerable head. It was loyalty to religion that kindled the fires with human fagots in the reigns of Philip, and Mary and Elizabeth. It was loyalty to country that stimulated Andreas Hofer and his handful of faithful followers to repeatedly drive the great Napoleon from the beautiful Tyrol. It was the same emotion that brought persecution, exile and libelous traducings upon our illustrious founder, Samuel Frederick Christian Hahnemann. It has always been loyalty to God, to country, to principle, to conviction, or to opinion that has been the motive to all great achievements everywhere and in every line of thought and action. This is the reason we have chosen the "Loyal Alumnus" as our theme this evening.

Before one can be loyal to an object two prerequisites are necessary: First that it have a right to claim devotion, and secondly, that it be a worthy one. One cannot be loyal to a fictitious or base object; such may have fanatical and unselfish patrons, but the emotion of loyalty must arise from a higher motive. It requires that its object shall be real, it must be righteous, it must include an intent to be helpful to mankind and it must have the element of permanence.

Again, it is always assertive, it is unselfish and it is ever ready to put its worth to a test.

Now, what objects have a claim upon our loyalty at this time?

First: The concrete one of Homœopathy.

Second: Our Alma Mater, the Hahnemann Medical College and Hospital of Philadelphia.

Third: Our brother Alumni.

Homœopathy is the only scientific law of therapeutics ever offered to the medical world; all other rules are mere guess work. It is the only system of medicine which by its own intrinsic worth has forced recogni-

tion even from its direct foes. In spite of persecution, of ridicule, of vilification, of falsehood, of social ostracism and the application of every force, physical and political, for its suppression, it still lives, and flourishes and works out its beneficent ends.

Homoeopathy possesses all the requisites which can command loyalty. Its existence is testified to by its 12,000 practitioners and its millions of adherents. No cause is more righteous, few, if any, have ever been so helpful to mankind, and its permanence is assured by its steady growth. It is conceded by both its friends and foes that it was the agency that broke the bloody power of the lancet, that checked the flow of unreasonable and excessive purgation, and diminished the administration of immense doses of death-dealing drugs from a long-suffering and dying humanity. These deeds alone are sufficient to attract and hold the admiring attention of the world. The emancipation of four millions of slaves in 1863 does not exceed in wide-spread beneficence the benign work of Homeopathy.

Scientific Homoeopathy has for its primal dogma the theory that "like cures like," but its corollaries have developed into nearly as remarkable truths as that which so startled the world in Hahnemann's day. The theory of psychosis was as certainly the forerunner of bacteriology as Franklin's kite was of our present knowledge of electricity. The extension of longevity, which our recent census has illustrated, is directly or indirectly due to that law. The decrease of mortality in insanity from more than forty per cent. to, sometimes, less than three per cent. certainly occurred in consequence of the happy effects of the law of similars. It was Hahnemann himself who first advocated the humane way of treating the insane, which obtains at the present time.

The hospital idea as applied to the care of the insane was developed by that gifted disciple of Hahnemann, Dr. Selden H. Talcott, at the State Homoeopathic Hospital for the Insane at Middletown, New York.

I will not weary you by recounting all the work performed by this grand system of medicine. It is familiar to you all and can be found in the books, tracts, and monographs devoted to the discussion and exposition of its truths. It will suffice to state that in every field of medical activity, in hospitals for the insane, private and under the control of the state, in obstetric hospitals, in surgical hospitals, in children's hospitals, in orphan asylums, in homes for old people, in private practice, general and special, the recovery rate has invariably been higher and the death rate lower than that of the dominant, or any other alleged school of medicine. Again, in the personal care of the patient, as in the diet, in nursing, in surgical skill and obstetric knack, the members of the homoeopathic school have displayed a marvelous proficiency. It was that school which first

called attention to the science of diet. Previous to the publication of the rules promulgated by the votaries of Hahnemann, the nearest approach to systematic regulation of diet had been the maxim, "starve a fever, stuff a cold."

Our colleges under the watchful care of the Intercollegiate Committee of the American Institute of Homoeopathy, present as complete curricula as those of any school of medicine, and the graduates of these colleges have attained as high an average and as large a proportion of successful candidates before medical examining boards as those from the self denominated "regular" school. Homoeopathy is well worthy of our loyal devotion, and we should always be proud of her achievements and the position she occupies in the world of science.

When a Mississippi regiment during the war of 1861, was about to go into battle, the Colonel admonished the color sargeant to bring back the flag with honor. He replied, "Colonel, I will bring back these colors with honor or report to God the reason why." That is the spirit that should dominate our souls when we receive our diplomas from our Alma Mater.

So much for the general cause which we love so truly.

There is another object of devotion to which we display our loyalty by our presence here tonight; the Hahnemann Medical College and Hospital of Philadelphia. An examination of our venerable Alma Mater will show that progress in the front rank of teaching institutions has always been the position she has occupied. She has been through fire of persecution; she has endured the inconvenience and degradation of poverty; she has withstood the disintegrating effects of internal strife, born of personal animosities, professional jealousies and sectional differences; but notwithstanding all this, she has maintained her position with dignity, and is today, what she has always been, the foremost homoeopathic medical college in the world.

The teaching force of our Alma Mater now consists of sixteen professors and forty-two lecturers and assistants of various kinds, together with probably a like number engaged in dispensary work. Her equipment, as you all know, is complete in every department, and is especially rich in those branches which are of the most practical importance. Her museum contains a very rare store of wet and dry specimens and facsimiles of normal, abnormal and pathological anatomy. This branch of the work is presided over by that accomplished gentleman, that ripe and versatile scholar, that friend of every student who has graduated within the past thirty-seven years, our beloved alumnus Prof. Rufus B. Weaver.

The children of our Alma Mater number about three thousand, and they are scattered over the entire civilized globe.

This brings us to the third division of our topic, namely, our fellow Alumni. What can we say of them? It is not necessary to say much, they have been busy speaking for themselves for more than a half century. In searching for their names in the Catalogues of the twenty homoeopathic colleges of this country, we find our alumni in the faculties of twelve. We also find that the deans of six and the registrars of four of our sister colleges were graduated from Hahnemann of Philadelphia. That shows what some have been doing. Others have been supplying us with text and reference books, such as Allen, Breyfogle, Farrington, Hughes, Cowperthwait, Boericke, Douglas, Verdi and others who have given us works on *Materia Medica*. The greatest hero of them all, Dean William Tod Helmuth, of New York, leads the writers on Surgery, and then follow such scholars as Gilchrist, VanLennep, Macdonald and others. In practice of Medicine, we note such popular writers as Goodno, Cowperthwait, Curtis, Lawrence, Johnson, Laird, King and many more.

There are, too, two other lines of work in which our fellows have been prominent. Go into any large farming community, thriving village or busy city and inquire for the leading homoeopathic practitioner and you will probably find a graduate of Old Hahnemann. Again among society workers, national, state or local, the reliable wheel-horses will often be recognized as alumni of this College.

It is not necessary to enlarge the list of activities. There is no field of medicine or surgery which our brothers have not entered, and not only graced, but headed the procession. We have every reason to be proud of the careers of the graduates from our Alma Mater.

May the sublime truths of homoeopathy continue to spread until every part of the globe has been illuminated by them. May our Alma Mater ever remain in the thickest of the fight and continue to enrich the ranks of the medical profession with well educated physicians and accomplished gentlemen—a combination necessary to success. And lastly, let it be the part of every graduate to be loyal to the great cause, loyal to his Alma Mater, who nourished him, and then he will ever be loyal to his fellows and to himself.—*The Hahnemannian Institute.*

Œdema of Infants not Dependent Upon Renal Disease or Toxic Œdema.

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The following illustrative cases will serve as a text for a few remarks upon a peculiar condition occasionally seen in children usually under six months of age, and which will cause the physician much anxiety unless

he has had some experience with it. It is a general oedema like dropsy, but is not dependent upon renal disease.

Case I.—Male child, three months. He suffered from malnutrition since birth weighing only $\frac{1}{2}$ lb. more than at first. Extremely fretful, continues craving for food which was usually vomited shortly after being taken. The mother was unable to nurse the child and it was given cow's milk modified according to Holt's formula III. and IV. making the proportion of food ingredients as follows: No. III, fat $2\frac{1}{2}$ per cent., sugar 6 per cent, proteids, .80 per cent, and a little later No. IV. as follows: Fat, 3 per cent, sugar, 6 per cent, proteids, 1.00 per cent. The child did not do well from the first, being troubled with vomiting and diarrhoea of undigested curds. Later milk modified by the peptogenic milk powder was given with no improvement. Barley water and milk was then used and still no improvement. When I first saw the child at 3 months it had just been placed on imperial grannum and milk and was vomiting less and having only one to three stools daily looking much like cottage cheese and having an extremely offensive odor. He suffered greatly from colic and the abdomen was considerably distended. I did not like the child's condition, but the parent thought it was doing better and wished to continue the food a little longer, to which I consented. I found conditions about the same at my next visit in 36 hours, but the child's face seemed fuller and we thought it was gaining. In 24 hours more it was evident that this fullness was oedema and I found it was general. The hands, feet, limbs and body were puffed and would dent upon pressure. The kidneys were freely active and an examination of the urine showed no trouble. The child was very fretful and restless, had a temperature of $99\frac{1}{2}$. No vomiting and bowels movement normal in frequency, but consisting of this dry cheesy matter. I immediately washed out the intestine with a normal saline solution and large quantities of gas and balls of curdy matter were passed. These injections were repeated twice daily for several days then once daily, after ten days discontinued. All milk was withdrawn for two days, giving instead beef peptonoids and egg water. After two days whey was added. Very gradually we returned to Holt's formula No. III, using however, sugar, i. e. 3 per cent., and a little salt; also from 1 to 2 drams of milk of magnesia to the quantity prepared for 24 hours. Arsenicum 3x was given throughout this time. The oedema lessened gradually and disappeared in six days. The child, now a year old, is perfectly well.

Case No. II. Baby boy, 2 months old, was nursed from the breast until three weeks old and then weaned because of some pelvic inflammation developing in the mother. Child was placed on cow's milk modified very similar to Holt's formula No. III. and seemed to thrive well until

the last week in July '02, when it began to vomit and suffered from diarrhoea of green watery stools with mucous and curds varying from 12 to 16 times in 24 hours. By the advice of a neighbor it was given imperial grannum and milk, and strange to relate almost the same result followed as in case No. I., i. e. lessened vomiting and diarrhoea and a seeming gain in weight which was soon such a pronounced oedema that the mother noticed it and I was called for the first time. My former experience was recalled and almost the same treatment adopted excepting I gave apis_{3x}, being selected from the absence of thirst. This child had a temperature of 102½ for two days but soon was normal. The oedema was very marked, so that the eyes were closed from the swelling, the arms and legs were hard as is often seen in cases of marked dropsical swelling, the urine was passed very freely and was perfectly normal. The greatest relief was given the child by the enemas. Large quantities of gas were expelled and several hours of restful sleep would follow their use. In this instance I gradually returned to the following food formula which the child has taken during the past week with much benefit: Cream oz. 3, milk oz. 4, water oz. 18, salt a pinch, Mellin's food heaping tablespoonful, milk of magnesia 1 to 2 teaspoonfuls, depending upon the frequency of the movements, being less if too frequent. Give 3 oz. every 2½ hours. The child is now 2½ months old. The cause of this oedema or dropsy is certainly not yet well understood. Holt who calls attention to this condition in his most excellent work on Diseases of Children attributes it to a "condition of hydraemia associated with feeble resistance in the walls of the small vessels through which a transudation of serum readily takes place." While I believe there is a lessened resistance in the walls of the small vessels it has not been my experience to find anaemia a marked feature. Dr. Acker has just published in the Am. Journal of Obstet., a series of cases of this condition which would not bear out the theory of anaemia. The term idiopathic has been used to describe this oedema or dropsy. I think this term should be abandoned for my experience and that of all other cases which I have read, would certainly prove the condition to be secondary rather than primary. Every case with which I am familiar has previously suffered from a distinct gastro-intestinal disturbance. In my two cases there was a distinct accumulation of gases and undigested foecal matter in the bowels due I had thought to the constipating effect of the large amount of starch in imperial grannum, but from other cases reported this foecal retention did not exist, or was not so reported, although gastro intestinal indigestion was present. Undoubtedly a condition of hydroemia might exist and add to the readiness with which this oedema is developed, but I believe the essential factor is the absorption of some toxin which poisons the vaso-motor nervous system

and produces dilatation of the smaller blood vessels. This oedema is not usually serious in itself, but indicates a bad condition of the intestinal canal. If this theory of causation is correct the indication for treatment is to free the system from toxin as rapidly as possible, and for this purpose I know of no other method so useful as thorough flushing of the intestines with normal saline solution. To effect this, an ordinary catheter may be inserted through the rectum high up in the colon or the ordinary rectal tube, wound with cotton or tape so as to make a firm, large anal plug about two inches from its distal end, may be used.

Also temporary withdrawal of milk or at least very greatly diluted milk, preferably whey should be given for a few days, with albumen water or peptone. This method of treatment was quickly beneficial in my two cases.

This is a condition which has interested me very much and concerning which very little has been written. Doubtless others have had experiences similar to mine and could add to the meager knowledge of its etiology.

To Remove Scales From the Colon.

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If you use hard water in a steam boiler the tubes become clogged up with "scales," if you burn coal in a stove the fire pot becomes coated with "scales," if you pass feces through a colon its walls become coated with masses of adherent dried feces corresponding to the "scales" of the boiler tubes and fire pot. So long as water is used in boilers, coal burned in fire pots and feces pass through colons these sequelae of the economic processes can be expected. Boiler tubes can be cleaned by means of scale removing compounds, fire pots can be cleaned by burning oyster shells therein and colons can be cleaned out by a process about to be described.

There are thousands of persons trotting or rather dragging around this world with their colons so badly clogged up with adherent feces that life becomes a burden not only to themselves but to all of those thrown in contact with them. Many a poor fellow has committed suicide who could have been remodeled mentally and developed into a useful citizen had his colon been given a thorough cleansing. There seems to be a reflex relation existing between the colon and the brain which develops a melancholia in chronic colonic disease—so frequently has this relation been noted in the case of has been dubbed the psychic seat of suicidal tendency.

To remove the "scale" from the colon the following paraphernalia is desirable.

Large fountain syringe or other suitable irrigating reservoir.

Cole's sigmoid irrigator, or a suitable substitute therefor. Cole's instrument can be bought for one dollar, but a satisfactory substitute can be easily made at an expense of a few cents of material and two dollars worth of time. With some of us who have a weakness for tinkering, a few hours time in fixing up home made tools is considered as beneficial in keeping us out of mischief. So here goes for the substitute: Take the female tip of the fountain syringe, the one with three or more holes in it; between two of these holes cut a shallow connecting groove; at the proximal end drill or burn two small holes through the shoulder of the tip; now take a piece of small copper wire, double it, pass the two ends through the two holes in the distal end (which you have connected by the groove) and out at the proximal end; draw the wire tight so the loop is buried in the groove and then pass the two ends through the two small holes burned or drilled in the shoulder; finally twist the two ends of the wire together after having drawn it up snug and tight. If you wish you may solder the ends together after twisting them. By slipping this prepared syringe tip into the open end of a goodly sized rectal tube you have an A. No. 1 colon or sigmoid irrigator through which you can pass an electric current without getting the effect of the electricity upon the sphincter muscles. To facilitate connecting with the battery a connecting post can be attached to the twisted ends of the wire.

A good faradic battery.

A rubber covered hard cushioned couch, or in lieu thereof, a kitchen table, a hard matted bed, or even the floor. Also a hard cushion or pillow to place under the hips, or a large book. If you have no rubber cloth use a piece of table oil cloth or a Kelly operating pad.

One capacious commode.

The modus operandi: Strip the patient of all superfluous clothing below the waist—in cold weather let him, or her, retain the underclothing, shoes and stockings, in summer strip him to "the buff." Lay him on the couch, elevate the hips at least six inches by placing the pillows under nates, anoint the irrigator with soap or glycerine (not vaseline or oil) and pass it into the bowel at least ten or twelve inches, open the clamp and let your irrigating fluid run.

As to the irrigating fluids there are several; each calculated to meet different conditions and to perform certain tasks. Those which I have found most useful in my work here in my sanitarium are cotton seed oil, crude oil, soapsuds, normal saline solution, distilled witch hazel, the Rochelle-turpentine mixture and plain hot water.

When one of those old chronic cases comes in where defecation has become one of the lost arts, where the lumps of adherent dried feces can be felt through the abdominal walls and where it takes a dozen pills or a

quart of "tea" to bring about an evacuation, I set the victim in the proper attitude and run about a pint or two pints of oil into the colon and follow it immediately with all the hot water the colon can hold. The water floats the oil along until it finally reaches the lower end of the ascending colon, completing the circuit of the horse shoe. The colon is the scenic feature of the alimentary route, the grand horse shoe bend and the scene of more troubles than most any other portion of the canal. Within a short time a little of the oil and most of the water will come away; some of the water is absorbed and most of the oil remains in the colon, soaks into the dried feces and mucus, lubricates the passage and prepares things generally for the grand movement of old stock that has been kept in hot storage for weeks and months.

After you have flooded the colon, filled it chock full, attach one cord of your faradic current to the irrigator and the other to a wet pad placed over the abdomen, turn the current on gradually, giving the patient all he can stand. At the same time knead the colon, and shake up the abdomen vigorously by placing one hand on either side and vibrating them rapidly but not too roughly. The electricity will induce muscular activity—I have frequently seen the contraction jump the electrode clear up in the air—and the manual vibrations and kneading tend to break up the adhesions existing between the colonic walls and the fecal accumulations.

These treatments should be repeated daily until you are thoroughly satisfied that all "scale" has been removed and that the colon is clean. In addition to the fecal masses you will notice in the stools small yellowish or brownish masses of dried mucus and possibly the white, stringy debris of a mucus enteritis. More than once I have had worms come away from patients who never dreamed themselves guilty of entertaining company of that sort. My experience is that it requires not less than one week of this treatment before the house cleaning is an accomplished fact and the patient ready for whatever other treatment is in store for him.

A few words on the subject of oil: Most "book authorities" advise us to use injections of olive oil; all pharmaceutical authorities tell us that nine-tenths of the olive oil is nothing but cotton seed oil. Why not save money by buying cotton seed oil as cotton seed oil instead of paying a fancy price for the false colors. My curiosity led me to search for a thin, bland, harmless oil which I could use instead of cotton seed oil at a less cost. I found it in the White Rose neutral oil of the Standard Oil Co., costing about twenty-five cents a gallon. It is satisfactory. I have also found the crude petroleum a most excellent cleanser. There is something about crude oil as a detergent that passeth understanding. I have used it for ulcers and cancers and it beats anything I have yet struck in my twenty years of checkered career. By way of caution always cleanse

thoroughly in alkaline water your syringe and rubber tubes after using oil, for oil rots rubber.

Sometimes cases come to hand where the oil treatment as just detailed fails to start the balls a-rolling. Then I resort to the following:

R Sal. Rochelle, ℥iv.

Glycerine, ℥iv

Ol. turpentine, ℥i.

Aqua q. s., usually Oii.

This solution is almost guaranteed to move heaven and earth, and to bring about an evacuation with a suddenness that will make the most lethargic rectum gasp with astonishment. Its use may cause some pain and smarting, some griping and groaning, but the groans will change to sighs of relief as the patient feels the burden of his bowels roll away. More caution: Don't use this treatment unless you have all necessary receptacles close at hand ready for instantaneous use.

After the use of these "starters" comes the "follow up system." Don't be sparing with your water. Should the patient feel as though he wanted to donate again the same day and yet be troubled with a little rectal stinging, encourage him with another irrigation, this time using plain soap suds—not too strong, but just a nice pearly iridescence to the water. Should there be much tenderness or soreness in the colon, sigmoid or rectum add some distilled witch hazel to the irrigation. Should the treatments cause a weakness or faintness, as they often will in old chronics and neurasthenics, use a normal saline irrigation. Where there is neither pain, soreness nor weakness, where the movement is secured with very little encouragement, use plain hot water. And, by the way, everything put into the bowel should be warmed to at least body heat, and a temperature of 105 degrees F. is frequently beneficial.

The Demand for Homoeopathic Physicians.

The demand for homoeopathic physicians throughout the United States far exceeds the supply. Thousands of small cities, towns and villages are unable to secure the advantages afforded by the homoeopathic system of medical practice. Demands for graduates of this school of medicine are constantly reaching the twenty homoeopathic medical colleges. The demands for physicians come from every state in the Union. Especially is this true of the Southern and Southwestern states, into which thousands of people in quest of pleasure, health and business are going every year. The American Institute of Homoeopathy, mindful of its obligation to the public, not only calls attention to this public need, but also to the fact that there are twenty medical colleges in the United States, thoroughly equipped to teach all branches of medicine and the science and practice of homoeopathy. These colleges earnestly solicit, and will welcome, young men and women of good moral, physical and mental endowment, possessing a high-school education or its equivalent, with an elementary knowledge of Latin. Those who come from districts having but few homoeopathic physicians will be especially welcome.

The above is an illustration of the missionary work that is being carried on by Chas. Getchell, editor of the *Medical Era*, and secretary of the American Institute of Homoeopathy; he having sent over 1,000 copies to the leading newspapers of the country. Certainly an effort in the right direction.

Motion in the Animated World.

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Vital processes are essentially chemical. The living cells, indeed, are similar to an electric battery: there is a chemical decomposition and heat-production. The split off molecules are electrically charged, as Prof. A. Matthews, of Chicago, has demonstrated, with a probability, adopting the views of Arrhenius and Van't Hoff.

Even the same laws of transformation of energy prevail in physiological as well as in physical events.

Thus the law of the greater intensity of the active energy holds good in both vital and physical processes. For instance, the gastric juice does not affect the lining membranes of the stomach, because its chemical affinity is less than the one in living cells. This is so in normal conditions; only in cases of poor nutrition of a part the gastric juice attacks this part. The stomach digests itself and forms an ulcer.

Then we know that energy must be adequate to the energy to be disengaged, otherwise a phenomenon is impossible. The whole digestion means adaptation in this sense.

Finally, there is a law that energy can be transformed only once into a certain other form. It becomes unfit for further use. In nerves and muscles we observe such a transformation and we know also that in nerves and muscles there is the greatest loss of substance, but scarcely any in glands.

But there is a great difference between physical and physiological phenomena which requires our full attention.

Chemism in living tissues and organs forms long chains of splitting off and recombining processes. But these series of changes take always one certain direction notwithstanding of various foods. This direction is given by the design of the organism.

Furthermore, all living bodies are reproductions. The processes which build them up are repetitions of the same action within the parental organism.

Finally vital work is cooperative and reciprocal, not only within the same organism but in the whole animated world.

These three qualities are not found in physical phenomena. In fact, they constitute what we term life.

As a result of these qualities we observe in vital processes and life itself, that there is no mathematical aspect and no causative relation as in an explosion or steam power. But we must explain this with a few words. A certain amount of substance and a certain intensity of the stimulation are necessary for the production of vital phenomena. But there are limits below and above which can not be transgressed. More food and greater heat rather destroy life. Prosperity depends not on abundance but of the own capability to make use of it. On the other hand privation has its limit, beyond it life is impossible. Chances of life are not in exact proportion to outer conditions. There is a factor in the equation which can not be eliminated. Furthermore, a living organism is always an individual; it can not be divided nor can it appear double.

Vital processes have also no causative relation to each other. The liver may be stimulated or regulated in its production of bile and sugar but the specificity of this action is not the result of nerve irritation. In this same way there is no cause and result in the descent of living bodies. The egg is not the cause of the bird and the father is not the cause of the son. We come to the conclusion that the living cell is an electric battery but a very complex one and enshrouded yet in mystery.

It is impossible to follow the tortuous tracks of a chemical body. We do not understand the well regulated production of body heat; we do not know the nature of nerve irritation. But when we say kinetic force produced in the living cell is best known we must discount even this knowledge to a certain extent. A change of the place or of the shape is more readily noticed than a change of temperature or even of the intermolecular position. But in reality we observe only the final links of the phenomena of motion.

We can not single out the phenomenon of motion from other changes; every attempt in this direction would destroy life. We can not calculate from the amount of food the strength a muscle may exhibit. We do not know either the long chains of chemical changes or the final product in nerve cells or muscular fibres which is ready for "explosion" after a slight irritation. Our studies are concerned to locomotion and the changes of size and form as the result of metabolism in the cells.

Vegetable and animal cells although microscopically small are very complex organisms. We must omit a detailed anatomical description. In general, we state that nucleus and protoplasm show an analogy of structure and chemical constitution; but the nucleus is rather solid or a more concentrated emulsion than the protoplasm and contains phosphorus. Thus an osmotic and a chemical interchange is possible. If there is no irritation from without, life within the cell depends on this change. It may last long as in certain seeds or the cell perishes soon as the germ cells of

vertebrates do. Certainly tissue cells and organ cells of cell states as of insects and higher animals can not be considered for obvious reasons. But an outer stimulus is always required to elicit a visible phenomenon; in fact, the irritant from without is essential for continuous processes which constitute evolution and procreation.

If an irritant affect a living cell at a certain point, the energy of this part of the cell becomes active. There is a greater tension and as a natural result the protoplasm will flow in the opposite direction. The cell will bulge out if there is no membrane preventing it and a pseudopod is formed. As soon as the greater tension subsides the protoplasm streams back under the nuclear influence; but it is ready for a renewed irritation from without. We have to assume this procedure as the principle underlying all kinetic manifestations occurring within cells. But we observe motion indirectly produced by other changes within the cells and physical forces will cause a movement of the changed body. They may be shortly mentioned before we proceed to our topic.

Motion is accomplished by various means; it is either passive as of red blood corpuscles or of the granular streaming sap, or of molecular movement of small crystals, or it is a swelling of cell walls as in the seed of crane's bill. Very interesting are the elaters of the spores of the horse-tail which are extended in dry state and curled up when moistened, for instance, by the breath. These phenomena can be repeated indefinitely; they have nothing to do with cellular life.

Another form of movement is the cell-turgor of plants. The protoplasm forms a sack with strands extended through the cavity filled with sap. The cell is enclosed with an elastic membrane. If there are solutions of different concentration without and within the protoplasm water may pass through it and the cell swells or shrinks. If the shrinking cells are placed in one direction a curvature will result. This is the case with creeping plants winding around a stem. A real collapse may be brought on sometimes by touch or other irritation as in *mimosa pudica*.

Still another mode of movement can be accomplished by a change in the specific gravity. A whole series of deep sea animals as *Radiolaria* or *Ctenophora* rise by forming a gas bubble of carbonic acid and sink by giving it off again. *Thalassicolla*, another *Radiolaria* contains numberless vacuoles filled with pure water which is lighter than seawater and keeps the organism suspended. Some low organisms as *Closterium*, secrete and eject a slimy substance and cause thereby a slight movement. The capsule of some seeds and fruits endures a strain by growing and upon a slight touch it bursts with a jerking motion. In all these modes of movement, we observe an action in the organism which is indirectly followed by a change of place.

Closing leaves and flowers, turning movement of the sunflower, chemotatic conflux of leucocytes, growth of a tree stem upward and root downward are changes transient to the following class of movement which we will discuss more extensively.

General physiology is neither comparative physiology describing different modes of how vegetables and animals accomplish a certain feat, nor is it physiological chemistry explaining the metabolism of different living bodies. It is rather absorbed in the study of the difference between living substance and the dead and of the cause of the various forms of life. Dwelling from such a point of view on motion as manifested by living bodies we will describe a few primitive forms and compare them with the mode of mechanical force exhibited by highly differentiated animals.

Spirochaetae are bacteria uniting the cells in long slender threads. They propel themselves forward and back in lively movements. In cases of recurrent fever we find such microbes in the blood. Pinnularia is a large diatom whose chlorophyll produces oxygen when exposed to light. If we have this diatom under the microscope in the field of sight and some spirochaetae in the same drop of water, we observe the bacteria swarming around the alga. If we remove suddenly the diatom partly from the light, the bacteria nearly become quiet for a while but soon they begin to swim to that part of the alga that is still in the light and producing oxygen.

Another experiment draws out attention for its bearing on medical science. We fill a short capillary tube with the culture of *Staphylococcus pyogenes albus* having one end of the tube closed up, the other open, and place the tube into the abdominal cavity of a rabbit, after ten or twelve hours' time the open end of the tube is stopped up with leucocytes. The culture product attracts the leucocytes and instigates their chemotactic action; because the experiment repeated with pure gelatine fails. But if a trial is made with the culture liquid which is perfectly sterilized and freed from bacterial bodies, leucocytes enter the tube in the same way as if the culture would have been undisturbed.

Aethalium septicum is a naked protoplasmic mass. If we place it on moist filter paper it spreads in various directions. But if we hang the paper from the edge of a glass downward to the water within which has been freed from all oxygen and is covered with a layer of an indifferent oil, and if we keep half of this myxomycetic mass in the water and the other half above, then we will notice that this living substance slowly retracts from the water. But the experiment made with ordinary water invariably shows the mass creeping toward the water. The oxygen is the cause of the chemotactic action. In this case we deal with active movement which we call amoeboid.

Amoeboid movements make nearly always a startling impression on

the observer. He really must take pains to overcome the idea of a purpose and of an aim in these actions. But if he bears in mind that all functions within a living body are strictly controlled, and that the adequateness of the stimuli necessary for life is very limited, he understands that conditions so carefully prepared beforehand must necessarily have a known result. With a change of our subjective point of view we find a physical explanation of most embarrassing occurrences. The animistic element which distinguishes living bodies from dead masses, manifests itself only by a constant and permanent control of vital processes. It becomes thereby the cause of a bodily and mental evolution. But a will of an amoeba or of a fertilized germ cell does not come more in question than a will in secretion of bile.

Amoeboid movement is produced by contraction and expansion. Expansion of amoeba is partial and irregular and causes the pseudopods which disappear again by contraction. But the little organism may expand in one or two directions at the same time and alternately contract. Expansion and contraction are the result of an alternate shifting the position of particles within the cells. Thereby the form is changed in a way that a greater surface is gained by expansion. This is possible in organisms without a membrane, or if the contents of the cell are real fluids. By all probability the osmo-chemical interchange of nucleus and protoplasm, termed karyokinesis is fundamental in such a movement. Stimuli from without cause the protoplasm to stream in an opposite direction. This movement is followed by the action of the nucleus which retracts the protoplasm, thus restoring the roundish forms. Pseudopods bulging out of the homogenous transparent protoplasm are lobate finger-shaped, filose like filaments, branching off, or reticulate. The protoplasm with its granules flows slowly toward the peripheral end, and from there back. Very often a stream is noticed also in opposite direction. These canals vary a great deal; sometimes the distances are considerably long. But the flow is always centrifugal and then centripetal.

So far we have considered the streaming protoplasm of low forms of life, of amoeba and other protists, but the same plan is followed in the cells of higher plants. It can be beautifully demonstrated on *Chara* and other water-plants. If we take a stamen hair of Spiderwort, we notice under the microscope of great magnifying power, that the chain of blue beads are cells. An elastic capsule encloses a thin layer of protoplasm, the primordial utricle, strands of protoplasm are transversely stretched through a cavity filled with sap. A nucleus can also be detected in one of these strands. The protoplasm both of the utricle and of the strands is quietly but constantly streaming, as indicated by the moving granules.

If the movement is irregular the botanists call it circulation, and if the

stream goes continually in one direction it is termed rotation. The modes of movement we have demonstrated, are either indirectly or directly the result of vital activity, and are due to properties pertaining to the whole organism. But in most animals transformation of chemical action into mechanical force is conferred upon special organs, which we call muscles in general.

The most primitive, or rather transient form of muscles we find in Infusorians. For instance, *Vorticella* has a single muscular fiber composed of a few fibrillae outside of the body and enclosed by an elastic sheath. We may compare it with a smooth muscle cell taken from the bladder of a frog.

Real muscle cells or muscle fibers are made up of fibrillae, which lie along side and parallel to each other, and do not mix with environing protoplasm called sarcolemma. They are smooth or cross striated. The fibrillae of the smooth muscles are formed by a homogenous substance. Their action is generally slow, sluggish, as we notice in the stomach, intestine or bladder. But the fibrillae of the cross-striated fiber is formed of a long string of segments, separated from each other by Dobies' lines (*Zwischenscheibe*). Each segment consists of two different substances, of which one is placed between the two halves of the other. It is double light refracting, darker and more solid. At its upper and lower end there are two lighter discs, whose substance is single light refracting. By great magnifying power canals can be noticed within the dark middle disc into which the light fluid substance streams from both sides, after a slight irritation. The whole segment becomes, thereby, shorter, but the middle disc gains in width and gets harder. After contraction the fluid flows from the middle disc back to both isotropic discs. Observations of this kind have been made on muscles of vertebrates and insects.

If the segments are placed in one straight line, parallel to each other, their contraction and expansion occur simultaneously. The result is a contraction and expansion of the whole muscle. The rapidity of the action is astonishing. The wing muscles of gnats make from 300 to 400 contractions in a second. Not less remarkable is the actual work. The normal heart of a man does work in one day equal to 20,000 kilogram-mometer, that is a force which lifts 40,000 pounds a yard high. Muscles are the most perfect and cheapest dynamos.

Of late when the question of autonomy of the heart arose, it was embarrassing to medical men and physiologists to believe that the heart muscle, although made up like skeleton muscles, contracts by itself, while all others receive a nerve stimulus. From a general conception of the contractility of the living cell as we have presented, it becomes evident

that so called automatic action is really due to stimulation, but of another form than by nerve irritation. It is the entering food that stimulates the heart.

Finally the movement of cilia and flagellae has to be taken in consideration. It is widespread and found among infusorians as well as in animals of highest organization. These motile structures are appendages of cells and form either one or two filaments as in spermatozoa, or there are many smaller ones as in some infusoria, or of the ciliated cells of the respiratory tract in the human body.

The protoplasm of the hair cell streams in one certain direction, and resembles, therefore, the procedure within muscles. But the movement is also rhythmical, which proves that it depends on the regular influx of nourishing substance. Thirdly, the movement is metachronic, or successive; one cilium after the other bends in the same direction until the last touches its neighbor of the next cell. This touch irritates the cell below and initiates reaction and movement of the new row of cilia. The whole movement appears like a waving cornfield.

Certainly there are many variations, and the effect is either locomotion of little organisms, or the removal of foreign bodies on the surface. The force exhibited is sometimes astonishing.

Glancing over the whole field of kinetic phenomena, we come to the conclusion that all active motion is produced by karyokinesis, stimulated by an outer influence. The various contractile structure naturally anticipates different modes of irritation. Skeleton muscles are irritated by nerves, opening flowers by light, creeping vine by mechanical pressure, white blood corpuscles and some bacteria by chemical affinity. In a similar way the rhythmical contractions of the heart or the motion of the cilia are caused by nutrition. Everywhere there is the same phenomena of alternating contraction and expansion of the living substance by means of reciprocal rearrangement of its particles.

OBITUARY.

W. H. CAINE, M. D.

Dr. Wm. H. Caine, one of Minnesota's best known homœopathic surgeons died at the Lewis Surgical Home in this city, September 16th 1902. Dr. Caine was born May 10th 1854, at Ravenna, Ohio, and has been a resident of this state since 1860. He graduated from the Chicago Hahnemann College in 1877 and settled at Stillwater where he practiced until some six years ago. About nine years ago the Doctor suffered a fall from a horse and ever since has had more or less spinal and brain trouble which eventually culminated in his death.

Dr. Caine was an aggressive member of our State Institute one of the surgeons to the Minneapolis City Hospital and lecturer on Orthopedic Surgery at the University College of Homœopathic Medicine and Surgery. Beside a widow the doctor left three sons, all grown.

MINNEAPOLIS HOMOEOPATHIC MAGAZINE.

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EDITORIAL.

Unnoticed Fractures in Children.

A recent writer in the *Medical Record* says that the systematic use of the X-ray has confirmed the suspicion that fractures may exist with but few or no symptoms. Some of the cases which he cites and they number some eighteen, were green stick fractures, while others were complete simple fractures. Ten of them were of the clavicle, three in the bones of the forearm, two of the tibia and three of a metatarsal bone. All of them going to show that physicians, as well as the laity, may underestimate the tolerance of children in fractures. Hence 'tis well in all cases of injury in small children to make careful thorough examination of all the long bones to avoid the possibility of error and the necessity for uncomfortable explanations later on. We recently had brought to us a young boy of four years, in whom both clavicles were fractured, and ununited, the mother assuring us that she had noticed the condition first about two years previously. The child suffered no inconvenience and the mother claimed no knowledge of any trauma to cause the fractures.

The power of the press, outside its editorial pages, seems now largely devoted to the salvation of lost manhood sufferers, female regulation, and

the booming of fake mines and fake medicine wonders. Our secular contemporaries should have a bureau where weak men might see the weak manhood editor and get editorial advice as to the best of the numerous quacks they advertise, and on whom ladies in trouble might call for sympathetic counsel. The enterprise of our daily newspaper would then be complete.

Conditions under which physicians from other states will be allowed to take up practice in Indiana without undergoing severe tests of qualification have been named by the State Board of Medical Registration and Examination of that state. The board has adopted resolutions setting out a policy of reciprocity with boards of other states. Since physicians are coming into Indiana constantly from other states the board regards the adoption of the resolutions of reciprocity as one of the most important acts of an Indiana board in years. The resolutions are as follows:

"The Indiana Board of Medical Registration and Examination will reciprocate with like boards of other states on the basis of the following propositions:

"First—As a prerequisite to reciprocal recognition by the Indiana board the applicant shall file in this office a certificate of good moral and professional character, signed by the president and secretary, and bearing the seal of the board by which applicant was last registered; the said board shall have agreed to fully reciprocate the action of the Indiana board.

"Second—The Indiana board will accept a certificate of examination of a like board in another state in lieu of the examination necessary under the law, to registration in Indiana; provided, such certificate shall show that the scope of such examination included the following named subjects: Anatomy, physiology, obstetrics, gynecology, materia medica, and therapeutics, theory and practice, chemistry, surgery, pathology, bacteriology, hygiene, histology, rhinology, medical jurisprudence, ophthalmology, otology, laryngology and dermatology, and provided an average of 75 per cent. is attained; and, provided, that in case the said examination did not cover all the above named subjects the applicant be required to submit to a supplemental examination by the Indiana board in the subjects not so covered.

"Third—Inasmuch as there is a large class of physicians who are known to be worthy and well qualified, who registered prior to the requirement of the examination test of qualification, and who, on account of having been long out of college, hesitate to submit to such test, this board will consider an application for registration to practice medicine in Indiana from a licentiate of another state, who registered in said state

prior to March 11, 1901, and was at the time of his registration the legal possessor of a diploma from a medical college recognized as reputable by this board; provided, that the said applicant shall have filed in the office of the Indiana board a certificate of good moral and professional character signed by the president and secretary, and bearing the seal of the board by which last registered, and provided, also, that the applicant be required to state under oath that he has not been, is not now, and will not become an itinerant; and, provided, that the said board shall agree to fully reciprocate such action of the Indiana board.

"Fourth—The fee for registration in Indiana on the basis of reciprocity shall not be less than that prescribed by law for registration on examination."

NEWS AND NOTES.

The Minneapolis Homœopathic Medical Society meets on the second Wednesday eve of each month; Henry C. Aldrich, M. D., President; Adele S. Hutchison, M. D., Vice-President; O. K. Richardson, M. D., Secretary.

The State Medical Examining Board holds its examinations at the State Capital building in St. Paul, the first Tuesday in January, April, June and October, C. J. Ringnell, M. D., Minneapolis, Secretary. The homœopathic members are Adele S. Hutchison, M. D., Minneapolis; Thos Lowe, M. D., Slayton and A. B. Cole, M. D., Fergus Falls.

Missouri Valley Homœopathic Medical Association.

The Missouri Valley Homœopathic Medical and Surgical Association will meet in Lincoln, Neb., October 22 and 23. A cordial invitation is extended to the homœopathic physicians of Minnesota. A royal time is promised, and all who come shall be welcomed and made to feel like cosmopolitan pilgrims to some mecca of health.

P. J. MONTGOMERY, M. D., Pres.

L. P. CRUTCHER, M. D., Sec.

The Homœopathic College, University of Minnesota.

The Faculty of the College of Homœopathic Medicine and Surgery have under consideration the idea of delivering a course of general lectures in the evening, during the coming winter.

While the question has not been fully decided, yet we are informed that the dates and subjects will probably be as follows:

Prof. Comstock, Oct. 28—"Race division and its influence upon the derivation of temperament."

Prof. Gibson, Nov. 10—"Glancoma."

Prof. Mann, Nov. 24—"I define a Homœopathic Physician as one who adds to his knowledge of medicine a special knowledge of Homœopathic Therapeutics. All that pertains to medicine is his by inheritance, by tradition, by right."

Prof. Ricker, Dec. 7—"The Sign Manual of Cardiac Diseases."

Prof. Briggs, Jan. 5—"The Moral, Mental and Physical Characteristics of the Ideal Surgeon."

Prof Williamson, Jan 19—"Some Prevalent Causes of Nervous Diseases."

Prof. Rome, Feb. 2—"The Evolution of Operative Technique in Gynecology."

Prof. Clark, Feb. 16—"Friar Lawrence's Sleeping Potion."

Prof. Ogden, March 2—"Diagnosis."

Prof. Roberts, March 16—The Essentials to Success in the Practice of Medicine.

Prof. Leonard, April 6—"Drugless Therapeutics."

Prof. Lufkin, April 20—The Uncommon Diseases of Children."

Prof. Matchan, May 4—"Preventive Surgery."

(Later we will announce where each lecture will be held.)

From the *Medical Century* we learn that among those prominently mentioned to succeed Dr. S. H. Talcott as superintendent of the Middletown, N. Y., Insane Hospital is the name of Dr. A. P. Williamson of Minneapolis, Dean of the Homoeopathic College of the University of Minnesota.

Dr. Franklin Patterson, Sioux Falls, S. D., is doing post graduate work in New York city.

Dr. F. W. Greiner has removed from Sheboygan to Baraboo, Wisconsin.

Dr. O. L. Chaffee, Stewart, Iowa, was married July 29th to Miss Grace J. Earhardt at Janesville, Iowa.

Dr. W. H. Carr, Two Rivers, Wis., was married July 19th to Miss Loveland of Chicago.

Dr. H. W. Hubbard has located at Buckley, Wash.

Dr. Doyen, according to recent cable messages from Paris, is using a new serum treatment successfully in the management of cases of furnuculosis, carbuncles and anthrax and other staphylococcus infections.

Dr. Fr. Gramenz, Bryant, S. D., reports business good in his bailiwick.

Dr. Geo. P. Connolly of Rockford, Minn., was recently in the city and reports business good with him.

Dr. W. F. Beery has removed from Beaver Creek to Hardwick, Minnesota.

Dr. Thos. Wildes of New York city, has recently been appointed medical inspector of the board of health of that city. In the civil service examination he was one of 157 who passed, out of 1,000 physicians who took the examination.

The American Institute of Homoeopathy at its Cleveland meeting withdrew its recognition of the National Medical University as a homoeopathic college in good standing.

Dr. O. W. Sutton of Bath, N. Y., is postmaster of that city and also chairman of the Republican county committee.

Syracuse, N. Y., physicians are making an organized effort to suppress those ill-bred individuals who address a physician as Doc.

Dr. Howard Crutcher, consulting surgeon of the Chicago & Alton R. R., is now performing the duties of local surgeon vice Dr. O. J. Price, according to circular C-354 issued July 31st, 1902, by the general superintendent.

Dr. C. T. Hood, Chicago, we are glad to report is convalescing from a severe attack of pneumonia.

Dr. A. P. Williamson has removed his residence to 1786 Irving avenue south. His office is still in the Pillsbury building, 602 Nicollet avenue.

We regret to announce the illness of Dr. D. A. Locke, who is suffering from typhoid fever.

Dr. H. H. Leavitt and family recently took a trip on the great lakes.

Dr. Bessie Park Haines was a recent visitor to Duluth and Isle Royale—Lake Superior.

Dr. A. S. Wilcox was visiting in Duluth in August.

Dr. E. D. Strong has removed from Bradley to Verdon, S. D.

The new obstetrical society of the American Institute of Homoeopathy through its executive officers, Drs. W. A. Humphrey, Toledo, Ohio, president; Geo. R. Southwick, Boston, vice-president; and B. H. Ogden, St. Paul, secretary-treasurer, has issued an appeal for membership and also for volunteer papers for the meeting next year. Do both and write to Dr. Ogden to that effect at once.

The New York State Homoeopathic Medical Society meets at Utica, on Sept. 16th and 17th. Dr. DeWitt G. Wilcox of Buffalo, is its efficient secretary.

Dr. Rex. V. Graves has located at Hillsboro, Iowa.

Dr. G. T. McDowell has removed from Iowa City to Tripp, S. D.

The two Kansas City Homoeopathic Colleges have united, this time surely. Dr. S. H. Anderson is dean and Dr. M. T. Runnells is registrar.

Boston University School of Medicine graduated a class of thirty on June 14.

Dr. H. V. Broesser, Hoboken, N. J., is examiner for the Prudential Insurance Company.

Dr. A. E. Booth is doing post graduate work in New York city.

At the Saratoga meeting of the American Medical Association in June last it was voted to allow all members to consult with homoeopaths, eclectics, etc., in fact any one who had the price. Verily, as Brother Jasper says: "The sun do move."

Dr. Thos. Lowe of Slayton, Minn., head physician of the Modern Woodmen of America for Minnesota, was in the Twin Cities, Aug. 20 and 21, in attendance on the state camp of that order.

From the *Pacific Coast Journal of Homoeopathy* we learn that Iowa has decided to give homoeopathic physicians charge of one of its Insane Hospitals and that the superintendency has been offered to Dr. A. Stanley Dolan, assistant superintendent of the Southern California Hospital for the Insane at Patton.

Dr. G. W. Lawrence of Colorado Springs, a member of the Colorado Medical Examining Board, died July 30th of Bright's disease.

Dr. W. A. Dewey of the *Medical Century* spent his summer at his Vermont home as usual.

Dr. C. E. Kahlke of Chicago, and Miss Agnes Crawford of Berlin, Wis., were married June 21st at the home of the bride's parents and are enjoying an extended honeymoon in Europe.

Dr. Clifford Mitchell has in press a volume on the "Diseases of the Urinary Organs."

Dr. Thomas C. Duncan of Chicago, died on July 16th, after an illness of but a few hours—a man well known and well liked—a writer of prominence and editor of the *U. S. Med. Investigator*, and one of the "Old Guard."

Dr. Winfield Scott Smith is president of the Alumni Association of Boston University School of Medicine.

Dr. Arthur S. Moore, formerly house surgeon of the University Hospital, Ann Arbor, has been appointed physician to the state asylum at Ionia, Mich.

Dr. W. V. Hanscom, Rockland, Maine, who is president of the Maine Homœopathic Society, formerly resided at Austin, Minn.

The Hahnemann Hospital College of San Francisco has been reorganized under a new charter and is now controlled by a board of managers, or trustees, chosen from the profession at large and is now known as the Hahnemann Medical College.

From the *Medical Visitor* we learn that the Wisconsin Homoeopathic Society meeting this year was not very well attended.

Flower Hospital (Homoeopathic) has a new actinolete for the treatment of disease by the violet rays, etc., of Finsen.

All Cortland County physicians are members of a Physicians' Protective League.

Dr. Martin Deschere of New York city, the well known writer and teacher of diseases of children, died at his home in New York city July 21st.

Clifford Mitchell, the well known writer and teacher of kidney diseases is very busy writing a new volume. He has now in press a work on Diseases of the Urinary Organs, which is larger and more complete than his previous works.

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No. 10

The Reflexes in Neuropathology.

W. B. CARPENTER, M. D.,

COLUMBUS, OHIO.

The frequent discussion of the reflexes, with their varied definitions and phases, in modern medical literature and in every society organized for the promotion of medical knowledge and therapeutics, shows us that there is a growing appreciation of the recent advances in the knowledge of the construction, powers and function of the nervous system. It shows, too, that there is a systematic effort by those interested to avail themselves of the results of these investigations for their own improvement and for the benefit of those they are called upon to treat. Many mistaken notions and generalizations have grown out of imperfectly understood revelations in this field, and many claims born of exuberant expectation are constantly being proved impossible and untenable. For such reasons true progress along these lines is much more slow than we could wish, and for such reasons it is necessary that we consider over and over this subject in all its phases "lest we mistake."

My effort at this time will be to hurriedly consider, in a general way, the reflexes as they relate to diseases of the nervous system; that is to say, the part the reflexes play in many of the cases that come to the specialist in nervous diseases.

First, then, as to the reflexes as they are symptoms of, or conditions in nervous diseases. At the last meeting of the American Institute an essayist defined a reflex as "the transmission of a stimulus from one given point to another having functional relations with it to subserve the operations of the organs involved." This brings us immediately to consider the cerebrospinal system of nerves which is called the only true reflex

system as far as original independent action is concerned. The afferent impulse from an irritated sensory nerve ending reaches the spinal cord, where it either passes upward to the centers of consciousness in the brain, or passes over to some motor neuron in the anterior horn of the cord. From the latter goes an efferent impulse that induces muscular action at or near the point of original stimulation, completing a simple reflex arc or action. This act may become imperfect or faulty or inoperative from destruction of either sensory or motor track, or of the neurons in the cord; and again from complete or partial obstruction or "blocking" of nerve currents. These reflexes are superficial or deep, the latter of which are more important. They are easily demonstrable in health, and their continued abnormal action furnishes valuable pointers toward determining where and what are the abnormalities in case of disease. As suggested before these reflexes are "exaggerated, diminished or abolished by disease." "They are exaggerated by those diseases that cut off the peripheral neurons from the inhibitory influence of the cerebral centers," which all can readily see mostly occurs in diseases of spinal cord and cerebrum when the motor paths are involved. The commonest lesions are "hemorrhage in internal capsule, degenerations of the pons or medulla (e. g. Bulbar Palsy), syringomyelia, meningitis, myelitis, lateral sclerosis, neoplasms and traumata." In all such cases the reflexes that have their seat below the lesion are exaggerated; those at the point or level of lesion are destroyed, and those above that point are unchanged.

These reflexes are diminished or abolished by impairment of the peripheral neurons through which the reflexes pass, as for example, "neuritis (in all its forms), locomotor ataxia, anterior poliomyelitis, syringomyelia, and localized myelitis." Shock may also succeed in temporarily abolishing the deep reflexes. Blocking of the nerve current by pressure of tumors, or other abnormalities, produces such variations of pressure that the reflexes may appear or disappear alternately, and so not prove thoroughly diagnostic. When the superficial reflexes are present it shows that the nerve cords and centers involved are healthy, but their absence does not satisfactorily diagnose disease, except in case of ocular and conjunctival reflexes which are constant in all healthy persons.

There recently came under my notice a case where troubled vision compelled the patient to seek aid. No abnormality was found by the oculist, but a large immobile pupil. Thorough investigation failed to develop any general physical infirmity. But the abolition of the pupillary reflex called attention to a probable spinal irritation. Such, doubtless, was due to an almost forgotten trauma, and under proper treatment normal conditions gradually returned.

So in a general way the condition of these reflexes points to certain

physiological or pathological states of the cerebral or spinal centers, or both, the more accurate determination of which needs consideration of other attending symptoms.

Turning now from speaking of reflexes as symptoms of nervous diseases, what can be said as to nervous diseases that are due to lesions in other organs somewhat removed, these lesions so influencing, by means of nerve conduction, distant centers that disturbed function and even organic change may develop? This brings into prominence the other great division of the nervous system, the sympathetic; but we must always remember that there is no dissociation of nerve systems no matter by what name known. Even the automatic and vasomotor systems are not distinct, being really comprehended in the sympathetic, and all attended by fibres from the cerebro spinal system. The sympathetic system has to do with all the conditions and organs of physical life. It looks after maintenance and repair. You know full well the underlying theory and facts of transmitted sympathetic influence. Disturbed function is sure to disturb other function. Once seriously disturbed, such function at a nerve center is again easily disturbed, and by irritations other than the original one. So from bad to worse till organic change results, or at least predisposition develops. All this may develop quietly, the cerebrospinal filaments not being sufficiently irritated to bring it all into the realm of consciousness. However, the damage will probably be more deadly than if such were the case.

Specialists find so often that the nervous diseases brought to them present no local or direct cause for the symptom complex, that almost the first thing thought of in reference to etiology is an irritation or condition at an orifice of the body or other center far removed from the point of attack or complaint. Epilepsy is a disease in point. It frequently comes from irritation or inflammation in the peripheral nerve apparatus, e. g., the involvement of certain nerve filaments in a cicatrix or other impinging abnormality; the convulsions of children due to any cause, or eclampsia of pregnancy may also end in epileptic convulsions.

Convulsions in children are mostly due to distant irritation; neuralgia, migraine, asthma, tachycardia, some forms of paralysis and insanity often look to some distant nerve irritation as a cause. Every practitioner knows the truth of these statements. Recently a case of melancholia that had been in the state hospital slowly recovered in my hands, after removal of all traces of injury to the reproductive organs and lower orifices of the body at times of child birth. Adhesions broken up, cicatrices removed, impinging growths properly treated are some of the procedures that have given results at times bordering on the marvelous. It is possible that almost every one of the diseases of the nervous system may be due to some

peripheral irritation, and in most of these cases it is equally possible to ascertain the true cause or set of causes. However, it is not always equally possible to remove the cause when it comes to the treatment. No one would for a moment hesitate to do so, though, when safe and wise. It is true that no effect can exist without a cause; but it is also true in such cases as we are considering that the removal of the cause does not always succeed in removing the disease even slowly. Why is this, many ask. Simply because the changes in the central nervous system are so serious as to place it beyond the realm of recovery, or else because the conducting nerve cords are so irritated and inflamed that they cannot do their part in carrying health to where they for so long carried disease. This last will explain many failures to recover after operative work.

As a corollary to this, I would submit that in those cases where the cause, though located, cannot be removed by direct operative measures, it would be unwise to resort to surgical procedure at any point where the sympathetic nerves can be readily reached in the hope that a nerve impulse would thus be created that would indirectly remove trouble local elsewhere.

But it was not and is not my intention to speak of treatment, only to gather together some thoughts, possibly not one of which is new, that will impress again the fact that diseases can develop from transmitted, as well as from direct physical influences. The specialist in nervous diseases realizes this as much as, if not more than, the practitioner in other lines. From the construction of the nervous system as a whole, and from the relations of its subdivisions to each other, the study of each case of nerve pathology must be special and individual, and no surprise need exist if some new revelation of reflex power or weakness should be manifested in each patient. And from it all we see that through the operation of the reflexes we discover means toward diagnosis, and also etiological influences that first disturb function, and then organic condition.

A Broader Philosophy.

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It goes without saying, that I am not an "official surgeon," but only a "general practitioner," or if you please, a common doctor, and if official surgery meant only the surgery of the orifices of the body, my interest in the subject would be comparatively slight and I should have nothing to say.

I well remember when its leading apostle, far younger than he is now, was manfully attacked in the American Institute of Homeopathy and the

attempt was made, then and there, to lay, once for all, the ghost that had obsessed him. That ghost was a composite entirely made up of numberless little devils that nagged and annoyed human beings into insanity, hopeless invalidism or the grave. The leading champion, then young, is still vigorous while his detractors have long since yielded to those reflexes that aim toward open grave yards and marked epitaphs. I spoke then for an open field and a fair discussion as being the only way of arriving at essential truth. It is not the multiplicity of facts that constitutes real knowledge, but the use made of them. The wider the range of observation, and the larger the number of facts observed, the broader the view, and the more intelligent may be the judgment based on such experience. The power to generalize correctly and wisely is the crowning genius of science.

Orificial surgery today has a recognition and a name, not because of the facts discovered along the line of its varied operations, valuable as these often are, but on account of reflected light thrown on the entire nature of man, the sympathy between parts large or small, and the systematic and orderly co-ordination of the whole. In short, it is the study of man not the study of surgery or medicine as an art that is of prime importance. Then it is the application of the science of man to the art of medicine or surgery that must constitute the true physician.

Now it happens that the leading genius of so-called orificial surgery is, in a very broad sense, a student of man. To careful observation of facts and scientific analysis he adds the power to generalize, and apprehend the synthetic whole. He has given to most persons who have studied his writings, a deeper insight of the mechanism of man, and of its intelligent operations. Indeed, he has illuminated his subject. To the man of cells, tissues and organs, a conglomerate whole, and only vague sequences, he has added that view of the "Composite Man" which in its scope and clearness is altogether a new view to the medical world, and he has connected the threads of sympathy and co-dependence between these composite parts in such a way as to suggest the inevitable sequence of the whole.

Viewed in this way the "Composite Man" is the last outpost of the thinking, feeling, conscious whole *Man!*

From this point there is no going backward. It is the stepping-stone to a real psychology. From the conscious to the sub-conscious man seems only inclusive, and a logical deduction, while from these to the supra-conscious man will be the next step. In other words, if we see continuity between mere physical consciousness, as displayed through tissues and organs and an underlying sympathetic whole. So also we cannot avoid the suggestion that above these same tissues and organs no less than be-

low them, in the metaphysical realm of mind and consciousness, no less than in that of sensation and feeling, there is also an orderly whole. Dr. Pratt has run us up against this logical necessity, and though many will at first take this step in the dark, the logical momentum will compel them to take it.

Many will say they do not care for this phase of the subject. They prefer to remain in the tangible and physical and have no use for metaphysics or psychology.

But my dear Saducees, that is not the point. It requires just this metaphysical searchlight to reveal the true nature of the physical plane. You may wonder at the puppet but you will never understand it till you discover *the fellow that pulls the string*. Your bogies will vanish, your superstitions disappear, and with a long breath you will say: "Ah, yes, now I *understand*."

I am advocating an intelligent understanding of the physical plane, and the sensuous life of man, and this only, and this is *impossible* without a knowledge of the springs of action and the principles that govern his life. I would wrest all these from superstition, bigotry and nihilism, and harness them to the car of man's progress here and now. I don't care a rap for any other world or any other life but this, for this in which we find ourselves is our particular prerogative and possession now. When we are through with this it will be time to consider another. The study of man in the way I have suggested and to which Dr. Pratt's "Composite Man" inevitably leads, will enable us to understand and wisely use the present life, to regulate it by law and order, to transform it from a labyrinth of bewildered fancies and fallacies, pains and penalties, spasmodic reflexes, chronic depressions and insanities, to a palace of hygiene and the garden of the gods, viz., Wise Men and Women.

I count it the ultimatum of philosophy to find the exact value and relations of any department of knowledge, and having thus assigned that department to its proper place to find something thereby added to the whole, and then pass on to the next department. This it is to discover "the rational order that pervades the universe."

In working out "the Composite Man" Dr. Pratt has added greatly to our literature and knowledge of the Science of Anthropology, and all the signs indicate that he has neither exhausted his resources, or got to the end of his tether. To many persons the idea that orificial surgery has any connection with a true science of psychology will be the farthest call imaginable. But I hope I have given grounds for such a conjecture at least.

A New and Painless Method of Removing Hemorrhoids.

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The painless treatment of the rectal diseases that come to us, is often as imperative as it is desirable. In a person enfeebled by age or disease, who is at the same time being more debilitated by loss of blood from, or pain in a protruding hemorrhoid, something must be done that will relieve the suffering and exhaustion. The hemorrhoid may be returned into the rectum, even above the sphincter, but it will immediately protrude again, and will probably be larger than before, on account of the necessary injury attending its return. Often it is firm and fleshy and cannot be injected on account of the pain that will surely follow that treatment.

There may be many reasons why an operation under ether, is either undesirable or unadvisable, but the patient is gradually running down and something must be done. Again the patient is away from home and cannot give the time to an operation, or if at home his affairs are in such condition that he cannot be detained from his business, but he must be relieved from his trouble so that he can be about, and attend to his business. In many other cases the natural dread of a surgical operation will keep many from having anything done, and the one who can adapt some means to the cure of the case will get it.

To better illustrate my proposition, I will describe case 1:

In January, 1896, I was called to see Mrs. G. in another city thirty-five miles away. She was nearly seventy years old, had been ill much of the time for several years, could be out of bed but little, and had been annoyed for several months by a large, fleshy, painful, bleeding hemorrhoid, that continually protruded from the rectum, and was almost continually bleeding. In a hospital or dispensary practice this patient would have been placed upon the operating table, and the after treatment left to the care of an intern, but in private work, a new family that had been sent me by another in which I had been fortunate enough to be fairly successful, with a patient much reduced in strength and well along in years, and with a purse of limited supply, a severe operation, with all accompaniments and attending expenses, was hardly advisable, with all the dangers involved, and the distance of the patient from me.

I therefore cast about for some safe and painless method that would remove the difficulty. The tumor was too firm to be much affected by the injection treatment, and applications of any description would be of little or no value. The mass was not at all pedunculated, though it was a little wider at its middle than at its base, therefore ligation would have been

difficult, and the inclusion of so much tissue in one ligature that was tight enough to thoroughly compress and destroy it would have been attended with more pain than the patient could bear. It occurred to me that I might be able to pass some fine sutures through the base of this hemorrhoid, in such a manner that its circulation would be obstructed enough to interfere with its nourishment, and it might die of starvation.

To this end I passed a fine needle armed with a fairly long catgut suture, transversely through the base of the tumor at its lower end, drew the suture through and tied it, leaving about an inch of its end projecting. Using this as a means of traction I gradually drew the tumor toward me and passed the needle again through its base, a little above, further up the rectum than the point of the former puncture, the needle entering on the same side from which it had emerged below. Continuing the traction, the same proceeding was also continued until the top was reached. At each passage of the needle some traction was made to produce pressure on the intervening tissue. At the top the thread was passed around the top of the growth, and the needle through the last stitch hole, thus ligating its extreme upper end that often admits a good sized blood vessel. From this point the return journey was begun, the needle being passed as nearly as possible through the same points as on the upward journey, and continued until at the bottom, after drawing all the stitches taut, the ligature was made fast to the end that was left when the first knot was tied.

In this way it was ligated in a number of small sections, and the blood supply for so small an amount of tissue could be easily destroyed by a pressure so slight that it would produce very little or no pain.

The tissue beyond the line of the suture quickly shrinks, being deprived of its blood supply, and by the time the operation is finished, very little of it is to be seen. If there is any excess it can be easily trimmed away or left to drop off, as the suture prevents the reabsorption of anything. My patient said that aside from the discomfort attending the handling of the parts there was no pain, and when I had finished there was no tumor to be found. At my visit on the following day the lady was very comfortable, there was no pain, no bleeding, no tumor, there was nothing to do but cater to an improved appetite. My work really ended with the operation, though I watched the case for a week to be sure there was no trouble. My next case was that of a lady older than the one just mentioned, and more feeble, she had three tumors, and had suffered much pain and loss of blood. Each of these tumors was served in the same way as in the first case, one at a time, as she was so weak that she could not bear much work at a time, but the second operation was less uncomfortable than the first, for she was in much better condition.

After a number of similar cases, one presented itself that showed its adaptability to another condition. A physician who roomed with me while attending a meeting of medical men that lasted a week, was much disturbed by a large hemorrhoid. The bleeding and pain were almost continuous, and had been, though not severe, for several months. I suggested doing something for him, but he feared that any treatment that would be effective would prevent him attending the meetings. I assured him that he would neither be hurt, or kept away from the meetings, and he accordingly invited two of his friends to witness the proceeding. That noon the work was done. At two o'clock he started out as usual, and attended everything on the program as if nothing had happened. Several months later he wrote me he considered his meeting with me a piece of good fortune, for he had seen no more of his trouble since my operation. This work is especially adapted to large fleshy tumors situated low in the rectum, and that cannot be retained within the sphincter, when found in persons who, for some reason cannot, or will not, have the more radical work done, and I cannot see why it is not effective, for I have not known a recurrence at point treated, though I have followed many of my cases for five years.

The doctor, whose case is described, submitted to the full American operation five years before my work. I speak of this as a new treatment because I have not known of its use by any other surgeon.

The Super-Sensible in Medicine and Surgery.

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Medicine is the least progressive of the arts and sciences. This fact arises from several causes. Medicine is not an exact science, it is a mixture of traditions, recorded experience, more or less reliable inductions, and an ever wide realm of current experimentation. Compared with chemistry or astronomy it is not reducible to any such formal statements of law as are these sciences. We can predict a chemical combination or an eclipse with absolute certainty. The law of gravitation expresses an invariable order of phenomena—the mind of the scientist or explorer is left in no doubt of its fulfilling itself in any problem involving its application. Medicine has no such guiding law that man has yet discovered. To exercise that *prevision* in medicine that can be shown in astronomy necessitates the discovery of such a law. Within a limited field the principle of *similia*, as it was erroneously called by Samuel Hahnmann, expresses the nearest approach to a law of sequence in medicine that can be anywhere found in the history of the art. Aside from this

single principle medicine nowhere fulfills the definition of science as a law or laws of invariable sequence of phenomena.

When we seek a reason for this condition in medicine we have not far to go, if we go in the right direction. Medicine, unlike astronomy or physics, deals with *living man*. The complex problem of life is a part of its subject matter, perhaps the whole of it. It is therefore evident that medicine can never be any nearer an exact and demonstrable science than is our science of life and being. In all our deductions from pathology, from the laboratory, from experiments of every sort in the curative art, there will remain this all pervasive, ever evasive life principle, like the variable in an algebraic equation incapable of either elimination or reduction to any fixed value. If then medicine is ever to be made rational, that is scientific, it must be through a rational insight into the *ego*, man the living, thinking, willing, feeling being. The laws of *mind* must be recognized as the laws of medicine. The study of medicine starts from the wrong premise. It assumes the sensible to be the real, and then proceeds to build its system as a necessary empiricism. Did it recognize what all the thought-world elsewhere recognizes, it would see that the sensible and the real are not at all the same. A thing is not real because I see it. I see it because it is real, and *I* am real. The whole world of the real is super-sensible entirely. The very foundation of medicine, so far as it has the faintest hope to attain to the rank of science is wholly in this *meta*, that is, super-physical realm *meta*-physics, above physics, has the key to all science, and without this no man can hope to unlock one of its mysteries. These facts no one is perhaps now to be found bold enough to deny. For all men admit the truth of Aristotle's aphorism: "The greatest thing in nature is man, and the greatest thing in man is mind." But the passive assent to a truth never evolved the power of that truth in life or any result. It requires active assent too, and full purpose of heart and brain to apply truth to progress. The real study of medicine, or the study of real medicine is too difficult for most men, or for most men when they do their studying, and is practically not included in the curricula of medical colleges. Medical men who are anxious to know the field of this broader and deeper outlook are compelled to begin the work almost *de novo* in the midst of the cares of practice. But few begin, and fewer still persevere. The profession is left a prey to half fledged collegians who essay to teach psychology, or to that other class of erratics who are always foisting some "new" philosophy of this or that upon the world. The accumulated wisdom of six thousand years in the study of man, the *ego*, sounds to most medical men as a late revelation to Brigham Young, Mrs. Eddy or Dr. Dowie. We are utterly incapacitated through ignorance of either directing, combatting or profiting by the resistless move-

ments in this world of metaphysics. Medicine finally falls in with the march of progress, but at the rear of the procession always. In spite of our oft-denials the Mrs. Eddys give medicine a great jarring. Why in the name of common sense should not medicine *lead* in this profound study of man? It would be easy to take away from these pseudo teachers all their claim to original research and discovery if medical colleges would teach a tenth part of what the thinkers of the world have known for a thousand years about man, the ego. Before that can be done we must substitute reason for sensation, force for phenomena, cause for effect, mind for matter, in our system of study.

The very first step in the *meta*-physics of man-study is to posit mind as a primal fact. No thought can be found except in the mind that thinks. *All* knowledge is mental, all science is mental. Mind is the intelligent and the intelligible. The universe of form and motion, of color and sound, of all phenomena, is the *expression* of mind. Knowledge comes by seeing mind in its manifestations. Ultimately all knowledge is the recognition of the one universal mind, of God; mediately mind knows mind in its finite manifestations. When knowledge rises to the immediate seeing of the divine mind it attains to universal, unchangeable and necessary truth, as in the axioms of mathematics. This self-activity of spirit, whereby it attains to self-recognition, mind knowing mind, and so becoming a *knowing* spirit, is the greatest conception in all science. As it is the greatest it is the most necessary to attain it in its fulness if one shall do any real thinking. All objects, all forms of sense, knowledge, all phenomena, the sky, the clouds, the flowers, at once are seen in the light of a new vision. They all become to *our thought* what they are in reality, the outward expression of mind, of idea. A marble statue, a painting expresses something, viz., an *idea*, and mind in recognizing or knowing the statue or picture does so by recognizing the *idea*, or mind it expresses, and so of every act of knowing of which we are capable.

It may thus be seen how all the phenomena of life are the outward expressions or manifestations in time and space of the *a priori* spirit. Much of what goes under the name of psychology, mental science or metaphysics is nothing more than a cataloguing of sense impressions. Men delving everywhere to find mind, but not knowing it when they see it. It is the psychology of the physical laboratory, of the test tube, of the sewer, of mud, and like the cuttle fish covers itself by its own exuvium, not seeing the ocean of being of which it forms a part. It is nothing but the most childish kind of physics, without a ray of light to guide its groping way. Medicine, or any other applied science can never attain to any guiding laws from such aimless troubling of the pool of life.

Mrs. Eddy is right in constantly asserting there is no sensation in

matter. She is not right in saying there is no matter in sensation—for matter is nothing other than the forms of mind in its manifestations. Sensation is a form of manifestation of the self-active spirit. The self-active spirit seeks freedom as its inalienable right and necessity. In its outgoings, if all of its manifestations be in harmony with the divine ideal of its creator, it is in health, mentally, morally, physically. If not it is diseased. The restoration of health consists in the reattainment of this harmony. We need not know whether the individual mind and the primal mind are one, or at one, perhaps we never shall know. We do know what it is for the self-active mind to seek *freedom*, i. e., self-expression, self-realization, self-recognition to complete perfection. This is the eternal law of being. Health is indeed harmony, and the whole cult of mental healers are right in insisting upon it. A perfectly healthful person is, one all of whose self-activities are in perfect accord with being.

It must be evident therefore that the healing art demands a rational, complete apprehension of the value and relation of every means for the restoration of these self-activities. Man is ever healed from within, not from without. All our efforts are vain except as we aid the activities of the self-active spirit. We cannot heal the dead—the dead are not diseased. Instead of warring factions in the healing art there ought to be universal congresses of all those who in any way assume to practice it. Man in his entirety should be our problem. There should be nothing but noble emulation among us to discover who best can serve the common cause. The use of drugs has surely vindicated itself as one of the means of affecting the modalities of the self-active spirit. Surgery has also proven its right to exist. Equally true is it that the methods of direct action of mind upon mind, Christian Science, Mental Healing, Suggestion, Mesmerism, Magnetism, Hypnotism, have a place in the one purpose of restoration. Which is first, or which is best is not a proper question to raise. We need them all, and he only is a fully equipped master who has them all at his command and knows how to use them. As physicians we should never forget that the healing art is a super-sensible art. Our minds can never be too keen in their recognition and interpretation of the outward manifestations of the inner spirit, for our value depends upon this ability. Our mission is to help the patient to realize himself. We can do no more, we can know no more.

What Influence has Official Philosophy on Man as a Physical, Mental and Spiritual Being,

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In what does man differ from the lower animals? That he possesses a reasoning faculty which is located in the brain, and a soul that is located,

where? No one knows. To me it seems that it might be in the abdominal brain.

There are intellectual men who say we ascended from the ape. We admit that both man and ape are skillful climbers, one physically, the other mentally and morally. 'Tis true that some men appear apish and are guilty of acts that no animal could or would be for they do not possess the mental faculties and soul which is influenced by environment and education.

Who ever heard of Plato, Luther, Columbus, Washington, Lincoln, Emerson, Hahnemann or a Pratt in the ape family.

During the dark ages, according to the Darwinian theory, the apes must have called a meeting and chosen two which seemed to be the most intelligent, one of each sex, and sent them on their mission as man. The remainder of their meeting returning to their respective homes contented with their lots, and their posterity are still apes in the sunny clime.

Granting that man has reasoning faculties, which animals have not, and a soul, which I believe was breathed into man, when God made him in his own likeness. In place of it being the natural breath which the majority of people believe.

The necessity and conditions of the natural breath were created by God to sustain life to the material body, and is breathed alike by all of the animal kingdom. When this material body becomes so inharmonious from various causes called sickness, that it can no longer exist, it is then at an end. Could this be the breath of life spoken of in the good book? If so, why does it cease in man the same as in all of the animal kingdom when death comes? Death is not life, it said the breath of life. Why does man, having two such superior qualities to those of other animals become so degraded, and a promoter of crime? Having these two qualities and being a free moral agent to the extent of a choice between right and wrong, though he is subjected to environment and education which the individual cannot always control.

Environment commences before we are born and lasts through life.

Education commences at birth and lasts until death.

Do thoughts, habits, et cetera, of parents have an influence in the unborn child? I believe so, much more than some physicians do. A mother's motive is more influential than a father's at least during pregnancy, for at that time the father has no direct influence on the child either by environment or education.

Ere this, you no doubt have thought, what has this to do with orificial philosophy, perhaps nothing but to me *very much*.

Now passing the part of my paper which refers to the physical man, for so much has been said, written and verified, that I could only hint of

it in this paper; though hope to awaken some thought on the remainder of my subject.

From a mental and moral standpoint, I think it more important to look after women orificially than men, as the child's enviroment and education comes first through the mother during gestation. Why do the genitals, especially the external, differ so greatly in man and not in the lower animal? Making a study of these abnormal conditions I find that parents who seem mentally and physically normal, give birth to children with various abnormalities. Looking into their domestic lives we find they were not congenial and had no affinity for one another. After a certain length of time one or both became dissatisfied, and affection, love, faith and hope gradually fade, until their marriage vows are a mockery and it simply becomes a partnership contract.

In the end they step from the sacred vow they made and are untrue in heart if not in act. Under these conditions they live as man and wife deceiving one another, from pretended true love, to that of being untrue sexually; living together with their sexual desires aggravated, their minds and souls being supplied with fuel for deceit, dishonor, treachery and at times murder. From the offspring of these conditions we invariably find abnormal sex organs, high temper, revengeful, selfish and destructive in their nature. Following a child of such parentage through generations, we have as parents liars, thieves, adulterers, murderers and criminals of all description.

No doubt you have all heard of the case I will relate, but perhaps not thought of it in the light in which I wish to present it.

Jane Toppan, age about thirty-five, of genial disposition and in appearance and manner was healthy and normal. A short time ago she was arrested in one of the New England states charged with murder.

During her adult life she had been a trained nurse; after arrest, they questioned her sanity; then after a thorough examination by mental experts, she was incarcerated in an asylum. The investigation that led to her arrest tended to show that she had poisoned some of her patients with no apparent motive for doing so.

Knowing that she had been placed in an asylum, and no longer in danger of criminal prosecution, she openly gave a statement of her past life; in substance as follows: that through peculiar habits she had at the age of twelve years become a sexual pervert. She experienced gratification in seeing people die, rather, in the act of dying, and later in life was disappointed in love; then in order to satisfy this craving she became a trained nurse, and followed it until her arrest. She had diligently studied poisons and the way to administer them so as to baffle and mislead the physicians.

When herself, she felt toward her patients all one could feel; but when the paroxysm came upon her, she would by an uncontrollable impulse poison the patients. As it took effect she would fondle and caress the patient, thus satisfying her sexual desire; if the patient passed into convulsions before death then her gratification reached its highest climax. Often the paroxysm would pass away before the poison proved fatal, she would then endeavor to revive and restore the patient and often succeed in so doing. By doing this she poisoned about thirty patients. What was the cause of this woman's uncontrollable desire which was satisfied in this queer and cruel manner? What would have prevented it? Had she not been disappointed in love and had become a mother, what might have been looked for in the child?

Chaddock, in *Psychopathia Sexualis*, says: "In spite of all the aids which religion, law, education and morality give civilized man in the bridling of his passions, he is always in danger of sinking from the clear heights of pure, chaste love, into the mire of common sensuality. In order to maintain ones self on such a height, a constant struggle between natural impulses and morals, between sensuality and morality is required. Only characters endowed with strong wills are able to completely emancipate themselves from sensuality and share in that pure love from which spring the noblest joys of human life." This I believe to be true, as it was in the above case, and in all who show a perverted instinct, but would find the lack of will power due to an impingement of the terminal ends of the sympathetic nerve. Had this woman been examined in early life no doubt there would have been found impingement and irritation of the sympathetic nerve. Had they been relieved by orificial work, she would have been in a position to receive good environment and would have sought an education that she might have been a blessing to her fellow men; instead of putting forth her energies to accomplish gratification to her weakened sexual nature, resulting in crime and dishonor to herself. If disappointment in love had not been her fate, and she had become a mother without the care of an orificialist, thus allowing her sexual instinct to remain which no doubt had passed down through several generations, but unfortunately fell to her, thereby developing a selfishness and disregard for the rights of others and an instinct to murder, do you think a child born under these conditions would be unselfish and indestructive in its nature; one that would allow his conscience to control him and through his reasoning faculties decide to lead a life that would show duty to God and mankind? Is the child the guilty one for carrying out what he received through environment for generations? He being a subject for orificial work, born with his mental faculties and soul perverted.

Do you think punishment, environment, education or christianity would prevent him from ending in an asylum, penitentiary, or on the gallows? What would? Relieve all irritation and impingement of the sympathetic nerve thereby aiding digestion, assimilation and nutrition, by which we would have a healthy physical being, thus giving the brain, the home of reasoning, an opportunity to develop and through it to judge right and wrong.

For every normal man is called upon to experience this warfare, between duty and desire, and between right and wrong; it is a conflict not to destroy the emotional nature of man, not to eliminate the element of passion from his soul, but for the regulation, elevation and purification; thereby directing it into legitimate channels of normal activity. For in proportion to the relative strength of his reasoning powers, as compared to his selfish emotions he will decide on the side of right as against wrong; and when his decision is made in any case of conflict, he enters upon a course of conduct accordingly. It is the aggregate of his decisions that make up his character. Mind is the subordinate means by which we reason, educate and discipline the soul, for weal or woe, in this world and the one to come. Through this faculty man becomes a free moral agent, and within it lies the power to prepare his soul for eternity. Relieve man of the irritation of the sympathetic system, and he will not be handicapped, by a preponderance of evil in his nature, and he will be able to meet the conflict between evil and good, and will let the strong instinct of his soul impel him forward in the path of progress toward the high ideals of the Master. Perverted or unperverted conscience, is by far the strongest emotion of the human soul, and when man has reached this point he possesses an unperverted conscience. Now, for the first time in his life he does firmly feel that he has duties to his God as well as to his fellow men and to himself. A perfect conscience must be based upon these three lines of duty. Man can not reach these points if born with a degenerated mental and spiritual faculty, and has infringement and irritation of the sympathetic nervous system. These being relieved then he is in a condition to receive environment, education and christianity; whereby conscience becomes an instinctive emotion, so supremely strong that the gates of hell cannot prevail against it. Then it is the strongest instinct of the human soul. Then it is that man will meet all of the trials, tribulations and disappointments of this world and calmly give his life rather than surrender the conviction of his conscience. In this way, nature surrounds every human soul that possesses a conscience, and forever guards and protects it under all circumstances and conditions, from the suggestion of crime or immorality. Reasoning from the deduction of my observations in the change of temperament and disposition produced by the application

of the official principle I firmly believe that such results could be obtained by the universal acceptance and application of the philosophy. Therefore within its limit lies the power to prepare man for a higher physical, mental and spiritual being.

A Layman's Description of his own case.

JOSHUA B. ADAMS,
DANVILLE, KY.

As a layman and a firm believer in your profession, I desire briefly and truly to state what has been accomplished by one of your craft upon myself. I am now in my fifty-fourth year, twenty-five of which have been spent in commercial pursuits, the last ten or fifteen in farming. Three years ago I developed what was termed a blind fistula in ano, which would discharge for several weeks at a time, then close and break out again, frequently changing the outlet within an inch or less of the previous opening. In the spring of 1901 my general health ran down, lost flesh, had poor appetite and weak digestion, grew very nervous and so shaky that my physician pronounced my case one of locomotor ataxia. In December of last year, 1901, my mental condition was such that I grew uneasy about myself and my wife again called a physician who, after talking a while with me said he would examine me. He took a sharp pointed instrument and touched the skin at several points, asking me if it gave pain. I answered that it did not. He at once quit the examination, never looking at fistula or into the rectum nor over the sexual system. Had a private talk with my wife and advised that I go to Hot Springs, Ark. After some parleying I consented to take his advice. I was very restless and nervous and could not eat nor sleep and seemed to be growing worse. My nephew, a young man 21 years old, agreed to accompany me. The night before starting the doctor and my brother-in-law visited me. I was told to share a bed with my brother-in-law. I afterward learned that the doctor occupied an upper room. Next morning I was conveyed to the railroad station and put on board train. My wife was allowed to wave an adieu at the station. Early next morning I found myself at Memphis, Tenn. I was only partly conscious of what was going on at this time. I have a memory of being pulled and hauled at until I was exhausted. There seemed to be a mob for me to withstand. I remember asking my nephew what he meant by treating me this way. He answered that the doctor had given him orders to manage me after this fashion. While waiting in the Union R. R. station at Memphis three or four stalwart policemen came and ordered me into a patrol wagon and landed me into a prison cage in the station house where there was not a stool, bench or bed on which to rest. I was surrounded by hoodlums of all sorts who

made the atmosphere hideous and infernal to a degree that almost drove me wild.

I had heard the doctor before leaving home tell my companion that my heart was weak and it occurred to me now to wish it would stop beating, and so desperate did I grow that I took a small wire nail that had been left in my cell and pushed it through my nostril and tore my nose wide open. The wound was dressed and soon after I was placed in a train, watched and restricted in every way and to my surprise landed home next day. One of my own brothers met me at the train and took me to my house. The doctor had hurried me off without even giving notice to my brothers of my condition. After a day at home I was sent to a private sanitarium. There were two physicians, alienists, in charge. One of them having had charge of a state asylum for the insane for ten years, had located as nerve specialist and consultant in mental diseases. After listening to a short recital of my case, terms were made of *twenty-five dollars* per week to board and keep a guard over me.

Never did they make any physical examination of my body ; diagnosis, a case of incurable melancholia in which there was a gradual losing of brain cells that would grow worse and it would be worse than folly to even hope for help. There was no means known to the profession of alienists. They had exhausted all authorities, with a practical experience equal to the best.

For four months I was not made acquainted with the location. The cottage in which I was placed contained four rooms, with windows barred with iron rods. In each room was a patient with a guard. Most of these guards were rough, loud mouthed vagabonds. One longest with me was noted as a drunkard and dope fiend. Never listened to as much low black-guard and infernal rot as was indulged in this cottage for the treatment of mental and nervous ailments. The guards had previously been employed at state asylums. No such employes should be allowed, much less sought after and employed in such institutions. I hope your society will one day awake the moral conscience of this nation to their duty. I was hounded and guarded for six long months, told that I was a fool for indulging a sane thought or expressing a sane desire. This, too, by both doctor (?) and nurse (?).

My wife, through the influence of a mutual friend, concluded to consult Dr. E. B. Johns, of Lexington, Ky., and told him my history and symptoms. He told her that he would be glad to make an examination ; and if he thought there was any hope for my restoration he would at least try to cure me.

The physician in charge of sanitarium consented to let Dr. Johns examine me in his presence. Dr. Johns noted a discharging fistula in ano,

internal nodule and external hemorrhoids, sigmoiditis, hypertrophy of prostate, almost occluding urethra, phimosis, with a constantly recurring balanitis, short fraenum. The alienist agreed that my physical condition might be improved; but hooted at the idea of its having anything to do with the mental feature in my case. With my guard I was sent to the city hospital and after a week of preparation operated for the above named afflictions. At the end of one week my melancholia was gone, and in three weeks I took my place in my home with my wife and four little ones. It is now eight weeks since my mental horizon cleared up. I am proud to say that with my wife, who is almost worn out with anxiety, toil and lonely vigils, we are with Dr. Johns, his good wife and daughter, taking a rest at Drennon Springs, Henry county, Kentucky. May this recital help each of you, by encouraging a work which is fraught with so much good to humanity.

I sincerely thank you and hereby acknowledge my indebtedness to the "Master."—E. H. Pratt, to whom Dr. Johns says I owe all I have received.

Anatomical Anomalies, with Special Reference to Surgery.

VALDEMAR PLETH, Ph. B., M. D.,

CHICAGO, ILL.

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"Even if strength fails, a good will should be lauded."—Virgil.

The subject, before discussion, may appear dry and even tedious because, as a general rule, only anatomists are interested in anatomical anomalies. Yet it is obvious that it is quite as necessary for the active surgeon to be as well versed in abnormal as the normal anatomy. Many fatal cases are recorded where the opposite results would have followed if the operator in question had been aware of any abnormal condition. Even the late Dr. Fenger and other leading scientists have recognized the immense value of abnormalities and their bearings upon their work, and, as a result, frequently make "exploratory operations," as—for example—to ascertain the condition of the fellow kidney where one is to be removed. More than one patient's life has been sacrificed because he had originally but one kidney. My observations, extending over a period of years have been gathered from diverse sources—hospitals, clinics, schools, and especially extensive dissections. The results have been a lengthy list of anomalies, some of which have been tabulated in this article; others were considered too insignificant, and therefore omitted. The anomalies are mentioned under the different divisions of vessels, nerves, muscles, etc.

Of vessel anomalies the following were observed, viz:

ARTERIES.

The middle meningeal artery (anterior branch) was at the point of bifurcation divided into four widely anastomosing branches; this condition should be thought of when trephining for hemorrhage from this artery, or when making the Hartley-Krause osteoplastic flap.

It was also found in a bony canal in several instances. In an examination of over one hundred skulls a bony canal was found in twelve cases on the right side; twice on the left side, and three times on both sides; once the canal was found on the sphenoid, the other times on the parietal bone (vide C. Plummer, of Northwestern University, in *Ann. of Surg.*, 1896).

Arteria meningeae "tertia" (author), arises from the arteria maxillae interna, passing upward through the foramen rotundum, supplying the dura and extending into the ganglion Gasseri (in two cases).

The facial artery arising normally, followed a course behind os. maxill. inf., opposite second molar tooth, and then proceeded normally.

In another instance it arose from the lingual artery; and vice versa.

The right subclavian arose from arch of the aorta, in lieu of arteria innominata.

In another it arose from the aorta, near the origin of left common carotid, and, swinging backward, turned toward the right, behind the esophagus. (Prof. Dr. Eckley, of Univ. of Ill., is in possession of this specimen.)

The left internal and external carotid arose separately from the aorta.

The left vertebral arose from aorta instead of left subclavian.

Arteria access. arose from right subclavian and ramified in the anterior scaleni muscles.

The internal mammary doubled in one case; bifurcating about an inch from its origin.

The left ulnar in two cases originated from the brachial at its upper third, and continued without branches to its point of destination; a somewhat similar phenomenon was observed in right radial in one case.

The epigastric (prof.), terminated in an extensive network (delta) in the right abdominal wall in two cases. In such a case an abdominal incision might cause a severe hemorrhage.

The renal artery was double in two cases.

In another subject the right renal arose from aorta as four distinct branches.

Again the left renal arose from the aorta as three distinct branches.

In one instance the gastric, hepatic and splenic arose separately from the aorta or from one another (absence of celiac axis).

The phrenic arteries sometimes arise from one another (common phrenic artery), or from the gastric or hepatic.

The obturator artery occasionally arises from anterior trunk of internal iliac or posterior trunk, or both, or from external iliac or epigastric profunda.

The accessory artery was found springing from third portion of the axillary artery running unbroken into base of thumb (right side).

The left uterine was absent in one case; the ovarian took its place.

The left ovarian was absent in one case; the uterine sent branches to substitute for the absent artery.

The arteria accessor arose from the femoral profunda sinistra running downward and parallel with the femoral, emptying into the same just before it enters adductus magnus muscle.

In one patient the spermatic sent a branch into left kidney.

VEINS.

Of vein anomalies the following were observed, viz.:

The left internal saphenous doubled in two cases, from the ankle up to the saphenous opening; this anomaly is well worth remembering, when operating for varicose veins of the leg.

The left femoral vein formed a small ring for the passage of anterior crural nerve; it looks almost as if the nerve was piercing the vein. There was a small amount of connective tissue between vessel and nerve.

The vena obturatoria duplex emptied respectively into the iliacs; external et internal.

The vena azygos minor., formed an extensive plexus, and entered as such into vena azygos major; there were at least half a dozen distinct branches.

The left spermatic emptied into the inferior vena cava, in lieu of the left renal.

NERVES.

Of nerve anomalies a few were observed, of which the following may be of interest, viz.:

The phrenic (dext.) ran downward over the anterior scalenus muscle, and over arteria trans. colli.

The phrenic ran thru a short tunnel under the fascia of anterior scalenus for about two inches, then proceeding downward normally.

The phrenic was double for about two inches over upper part of the anterior scalenus, afterwards uniting into one cord.

The phrenic in one case was found immediately behind the clavicle.

The phrenic arose solely (in one case) from fourth, the cervical nerve. (Dr. Greene, of Northwestern University, states this anomaly occurs in about four per cent; also vide: Green in American Journal of

Medical Sciences, 1902, and Lushka in Arch. Gen. de Med., Paris, 1854: Du Norf. diaphragmatique chez l'homme, etc.)

The spinal accessory was double for a distance of two inches, entering sterno-mastoid on its posterior inner aspect, and swinging around the mastoid portion of the muscle, and proceeding then normally. The spinal accessory arises from the anterior division of second and third cervical nerves; vide: Trans. American Surgical Association, 1880, p. 500.)

The greater sciatic nerve divided into external and internal popliteal branches, just under the pyriform muscle, running parallel downward.

The great sciatic nerve appeared under the quadratus femoris, so the nerve was hidden on superficial inspection (vide: Gros-Jeau: Lyon Med., 1870; Anomal du nerf sciat, etc.).

The brachial plexus presented numerous variations of minor importance, e. g., communicating branches, extra twigs, etc.

The cutaneous minor arose from the cutaneous internal in lieu of from inner cord.

The ulnar ran to the inner side of the back of inner condyle (displaced), and wound between the two heads of Mus. flex. carp, ulnar and into the arm.

MUSCLES.

Of muscular anomalies there were but few observed, viz.:

The sterno-mastoid was present only as a mere cord. In another case the muscle was used with the trapezius; in fact, I could not distinguish between the two muscles.

The omo-hyoid was entirely absent in one case.

The digastric was also entirely absent.

In one case I found an accessory to the flexor profundus digitorum; it arose from the inner condyle, and followed the flexor digitorum profundus; was inserted into the last phalanx of the second digit (the case is described in extenso in Plexus; Official Organ of Univ. of Ill.).

The plantar was absent in one case.

The right rectus abdominis entirely absent in one case. Kelly, of Johns Hopkins Hospital, has reported one case of the absence of all the abdominal muscles, in Journal of Am. Med. Assn.

The pectoralis minor was entirely absent in one case; the space normally occupied by the same was filled with fat; the axillary was normal in its course and branches given off.

The stylo-hyoid in cadaver showed absence of perforation for passage of the digastric muscle.

The pronator quadratus was present as a thin cord (Fenwick, Cana. M. J., 1854, reports a M. pronat. quadrat duplex.)

The palmar longus was absent in one case.

The pyramidalis was absent in one case.

Of other anomalies outside those of vessels, nerves and muscles, the following were observed, viz.:

OTHER ANOMALIES.

Sutura petro-squamosa was present in a subject about twenty years of age. In this subject, however, all the sutures were highly developed (according to Symington, this suture does not exist after the first year.)

The infra-orbital foramen existed only as a notch in several cases.

Posterior and middle clinoid processes were elongated and joined so as to form a bony bridge (left side). On examination it was found that this bridge traversed the brain substance; the canal thus formed by basis cranii and the clinoid processes was big enough to admit a lead pencil. (I have this specimen in my private collection.)

The ductus thoracicus terminated (in one case) in an extensive delta (eight distinct branches), which separately entered into vena subclavian sinistra. In another case there was a bifurcation opposite vena subclav. sin.; this smaller accessory branch turned toward the right and emptied into V. subclav. dext., near the right lymphatic duct, but not joining with the same. An operation, e. g., for tubercular glands in the neck of such an individual might have resulted in wounding one or more of the duct branches, perhaps fatally.

Branchial fistula in two cases, opposite fourth cervical vertebra.

Thymus present in two subjects, apparently middle-aged.

Thyroid accessory in one case; it was situated just behind manubrium sterni.

Foramen ovale et spinosum confluent in one case, on the left side (faulty development in junctional areas).

Kidney absolutely absent in one case; no trace of any (corresponding) ureter; the possessor of this anomaly was otherwise well built and nourished, and died in eclampsia with the second child.

Ureter (left) double in one case; just before entering the bladder, the branches united into one canal.

Ureter double (left) for upper one-half in its course.

Gall-bladder rudimentary in one case; about the size of a walnut. Gall-bladder situated in the left side, in lieu of in the transverse fissure. (This specimen is in the possession of Dr. Eckley, University of Illinois.)

Laryngeal cartilages completely ossified in one subject, perhaps thirty years of age. Dr. Burns, of Northwestern University, and Dr. W. Eckley, of Illinois University, have each noticed such a case. (Dr. Chiewitz, of Copenhagen, has written on the subject, in *Arch. f. Anat. u. Physiol.* 1882: *Untersuch ueber die Verknöcherung d. Mensch'l Kehlnorpel.*)

Pancreatic duct (duct. Wirsungianus) double in two cases. The relation of calculus in the ductus communis choledochus to fat necrosis

(pancreatitis) by stopping the flow of the pancreatic fluid has of late been extensively studied (vide: Dr. Kraft in *Hospitalstidende*, Copenhagen, 1902), and it may be of interest to know that Shiermer (Dissertation, Basel, 1893), in 66 per cent. of cases examined found an anastomosis between duct. Wirsungian, and duct. pancreat. accessor. (s. duct. Santorini.).

MESENTERIC ANOMALIES.

In one case the mesentery was found to be in common with the small intestines, and right half of colon. Caused by the inferior arm of the umbilical loop crossing the upper arm behind it, in lieu of in front of same.

Cecum was found (in one case) in a place corresponding to flexur. hepat., and in one case cecum was found in a place corresponding to middle point of colon descendens. (This case I have treated in an article in *Amer. Journal of Surgery*, 1901, entitled, "Anomalies of the Mesentery as a Causation of Ileus and of Appendical Abscess in Left Iliac Fossa.) An interesting article is found by F. de Guervain, in *Arch. f. Klin. Chir.*, Bd. 65, p. 256; in this article he mentions a case where the entire colon was found on the right side, and the small intestines in the left side. (The opposite would take place, where the umbilical loop does form, but development of tractus intestinalis suddenly stops:—The Author.)

He describes in the same article a case of partial situs inversus.

Testes undescended (the left side) in five cases; this condition was double in one case.

Foramen Winslowii was closed in one case; bursa oment. minor otherwise presenting a normal condition. No evidence of a hydrops saccatus.

Cochlea obliterated in one case; the subject was middle-aged (according to E. Andrews, of Chicago, such a condition is often congenital.)

REMARKS.

With the above list of anomalies, and the hard work it represents, I hope to incite some of you to further study along the same lines. It is an unlimited field of usefulness and interest. In our modern schools of medicine, anatomy is too slightly treated, and too little time devoted to this, the fundamental study of the medical sciences. Comparatively more time is spent on physiology, chemistry and pathology than on anatomy, which really should be the center around which all the other studies should be grouped; like the sun is indispensable to its surrounding planets. When this study shall have reached a higher perfection then we may expect an increase in better professional men, and the avoidance of much useless and meddlesome surgery.—*Am. Joul. of Surg. and Gynecol.*

MINNEAPOLIS HOMOEOPATHIC MAGAZINE.

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EDITORIAL.

Chicago, The Vienna of America.

Monday morning, Sept. 8th, saw your correspondent sitting under the sanctuary in the Chicago Homoeopathic Medical College, listening to the teachings of that eloquent speaker and unexcelled teacher in surgery, and more especially orificial surgery and the orificial philosophy, Dr. E. H. Pratt, who was conducting his sixteenth annual September class in orificial surgery. The cases operated upon by this most deft and daring surgeon, ran through the list met in any large clinic given over to abdominal and pelvic surgery and were all described and demonstrated to the delight of the class of over forty who sat through the week drinking from the fount of knowledge.

The assistants to Prof. Pratt this year were Drs. Aldrich of Minneapolis, editor of this magazine, McBurney of Austin, Illinois, Staads of Sioux City, Iowa, and Connett of Morristown, New Jersey. Dr. Perry, of Farmington, Minn., was scheduled to appear as one of the assistants, but owing to some serious cases of typhoid fever he was unable to appear.

On Wednesday afternoon, Sept. 10th, the fifteenth annual meeting of the American Association of Orificial Surgeons was called to order by President Henry C. Aldrich of Minneapolis, who in the absence of the secretary, R. St. J. Perry, appointed Dr. F. W. Range of Roseville, Il-

linois, secretary pro tem. After reading and approval of the minutes of the preceding meeting, President Aldrich delivered an interesting and brief address upon Conservatism in Surgery following which papers were read by Drs. Geo. R. Herkimer, Dowagiac, Mich., entitled, *What Influence has the Orificial Philosophy upon Man as a Spiritual, Mental and Physical Being?* Dr. N. B. Delamater read *Several Pages from My Case Book*, and was followed by Dr. C. A. Shoemaker, who spoke upon, *A Knowledge of Orificial Surgery Necessary to Proficient Diagnosis*. Dr. W. B. Carpenter, Columbus, Ohio, wrote upon, *The Reflexes in Neuro-pathology* (which most excellent paper appears elsewhere in this issue.—Ed.)

Dr. F. W. Range's paper descriptive of a case of chorea was passed upon the doctor's request as the case had been seen in the clinic that day, its history given, and an operation done by Dr. Pratt.

Dr. C. A. Weirick read a beautiful memorial on Dr. W. F. Curryer of Indianapolis, a former president of the Association, which memorial had been prepared by Dr. O. S. Runnells, of the same city, following which the papers of Drs. J. D. Buck, of Cincinnati, on, *A Broader Philosophy*, and H. E. Beebe, of Sidney, Ohio, on, *Reflexes in Disease*, were read by Dr. Aldrich.

The discussions had been spirited and interesting and the society adjourned at six o'clock, to convene again at 8 p. m., when Dr. Byron Robinson gave an exceedingly interesting address of an hour or more on, the *Utero-Ovarian Artery*, and the *Ureter*, illustrated by enlarged drawings made from an X-ray radiograph, made a few hours after death, the arteries being injected with starch and red lead.

Dr. E. H. Pratt spoke at length upon the subject, *How to Succeed with the Practice of Orificial Surgery*.

On Thursday afternoon the Association listened to papers by Drs. T. E. Costain, Chicago, on *Shock*, J. Judson Thompson, Chicago, on *Some Interesting Surgical Cases*. Dr. C. E. Sawyer, Marion, Ohio, on *The Lessons of Experience*, Dr. P. S. Replogle, Chicago, *Indications and Methods for Hysterectomy*, and Dr. M. K. Kreider, Goshen, Indiana, *Some Orificial Nuggets*; this last paper bringing to a close the best attended and most enthusiastic meeting the Association has held for a number of years. The officers for the ensuing year are: President, Dr. L. G. Van Scoyoc, Kansas City, Mo.; first vice-president, Dr. A. B. Grant, Albion, Michigan; second-vice president, Dr. M. K. Kreider, Goshen, Indiana; secretary, Dr. F. W. Range, Roseville, Ill.; treasurer, Dr. T. E. Costain, Chicago, Ill.; censors, Dr. W. E. Bloyer, Cincinnati, Ohio, Dr. C. A. Weirick, Chicago, Ill., Dr. G. L. Freemeyer, Benton Harbor, Mich.

Prof. Pratt extended an invitation to all in attendance at the Association and to all members of his class to a reception at his cosy home in Evanston, Illinois, on the evening of Friday, September 12th, and a large gathering of the clans occurred then and there, and all enjoyed to the utmost the hospitality of their genial host and his charming wife, and voted it one of the most enjoyable occasions of the week.

Among those in attendance on Prof. Pratt's course and the meeting of the Association of Orificial Surgeons were the following named individuals:

D. R. Bement, Mount Ayr, Iowa; G. H. Cole, Conneaut, Ohio; Connett, Morristown, N. J.; E. G. Cushing, Des Moines, Iowa; W. H. Hinklin, Marion, Ohio; Mundy, Forest, Ohio; Harry B. Pratt, 334 Montgomery street, Syracuse, N. Y.; W. T. Scott, Neihert, Mont.; Ellen Stan. Souder, R. F. D., Rockwell City, Iowa; Ella Still, Des Moines, Iowa; Henry C. Aldrich, Minneapolis, Minn.; F. W. Range, Roseville, Ill.; N. B. Delamater, Chicago, Ill.; M. J. Hill, Sterling, Ill.; Frederick DeHaven, Louisville, Kentucky; H. A. Rodebaugh, Columbus, Ohio; B. E. Sankey, New Castle, Pa.; Geo. H. Parsell, Falls City, Nebraska; T. W. Roberts, St. Paul, Minn.; L. Burris, Puxico, Mo.; G. L. Freemeyer, Benton Harbor, Mich.; J. H. Krueger, 9134 Erie Ave., South Chicago, Ill.; F. E. Brown, Milwaukee, Wis.; C. A. Weirick, Chicago; E. E. Reininger, 353 Oakley Boulevard, Chicago, Ill.; Adaline Keeney, Albert Lea, Minn.; Metta Davis, Fremont, Neb.; W. B. Hotchkiss, 245 Ogden Ave., Chicago, Ill.; L. J. Benson, 703 W. Harrison St., Chicago, Ill.; E. J. Varmilyea, 638 Jackson Boul., Chicago, Ill.; J. D. George, Indianapolis, Ind.; Geo. L. Guthrie, Greenwood, Ind.; C. W. Shill, LaFayette, Ind.; Wm. Brimble-Combe, Carmi, Ill.; C. A. Lutgen, Auburn, Neb.; Samuel Metheny, 519 North 16th street, Lincoln, Neb.; C. A. Shoemaker, Lincoln, Neb.; J. H. Sharp, Genesee, Wis.; Jno. J. Lawshe, Atlanta, Ga.; James T. Warnock, Atlanta, Ga.; S. D. Warnock, Atlanta, Ga.; W. T. Gemmill, Forest, Ohio; A. B. Grant, Albion, Mich.; F. H. Longley, North Platte, Neb.; John Rudolph Bangert, Shippensburg, Penn.; C. J. Loizeaux, Des Moines, Iowa; A. M. Linn, Des Moines, Iowa; E. B. Crowell, Minneapolis, Minn.; J. McFarland, Centerville, Iowa; F. H. Boutin, Hampton, Iowa; D. R. Summy, Columbus, Ohio; Victor F. Huntley, Morrison, Ill.; Geo. Patchen, Manitowoc, Wis.; C. O. Hook, 3537 Cottage Grove Ave., Chicago; C. C. Robinson, Indiana Harbor, Ind.; G. R. Herkimer, Dowagiac, Mich.; A. B. Spinney, Reed City, Mich.; C. E. Cole, Prairie du Chien, Wis.; G. J. Hirth, Milwaukee, Wis.; W. G. Steele, Philadelphia, Pa.; H. L. Kampen, Kirkwood, Ill.; W. E. Bloyer, 22 W. Seventh street, Cincinnati, Ohio; R. R. Haas, 1158 Lawndale Ave., Chicago; H. B. Pinkerton, Waterloo, Iowa; Marie Louise Hunt, 451 E. 42nd street, Chi-

cago; L. G. Van Scoyoc, Kansas City, Mo.; A. Dewey Chapin, 4402 Greenwood Ave., Chicago; C. E. Sawyer, Marion, Ohio; S. Staads, Sioux City, Iowa; B. A. McBurney, Austin, Ills.; J. J. Thompson, Chicago, Ills.; W. B. Carpenter, Columbus, Ohio.

During the session eighteen new members were elected to and affiliated with the Association.

Special work in other lines than those of surgery and orificial surgery attracted us and the two hours spent daily in the laboratory of that noted writer on and specialist in kidney diseases, Clifford Mitchell (whose kind personality and pleasant methods of instruction endear him to all who are associated with him) were hours we consider exceptionally well spent.

All extra time was spent in attendance upon the lectures and clinics at the Illinois School of Electro-Therapeutics in the Champlain Building, where we listened to the teachings of such bright and shining lights in the electrical firmament as Dr. C. S. Neiswanger, who in addition to being president of and a professor in this school, is professor of electro-therapeutics in the Chicago Homoeopathic Medical College, and one of the allopathic post graduate schools, Dr. E. H. Grubbe, also professor of electro-therapeutics in Hahnemann Medical College, and G. G. Burdick, who is also a professor in the South Side Policlinic.

Other professors in the school are Prof. Treadwell, instructor in Physics in the Lewis Institute of Technology and editor of the *American Electro-Therapeutic and X-Ray Era*, Drs. Coleman, Andrews, Martin and Clevenger, all men of prominence in their specialties. The work in this school is good and up-to-date and its course of instruction makes one begin to realize the possibilities of good in electro-therapeutics.

Brother Dewey in the September Century, has some pertinent suggestions as to arrangements for future meetings of the American Institute, which we trust local committees, will in the future take unto their hearts.

In the August number of this MAGAZINE appeared an article on X-ray burns taken from the *Medical Era*. Unfortunately due credit was not given and we herewith endeavor to make the amende honorable.

BOOKS.

TRANSACTIONS OF THE AMERICAN INSTITUTE OF HOMŒOPATHY—FIFTY-EIGHTH SESSION HELD AT CLEVELAND, OHIO. JUNE 17-21, 1902. Edited by Ch. Gatchell, M. D., General Secretary, Chicago, 1902.

This volume of nearly nine hundred pages was in our hands on Sept. 15th, in its complete form, less than three months from the adjournment of the Institute.

The volume contains some typographical errors, but they are immaterial and of no consequence.

Dr. Gatchell, the worthy secretary, is to be congratulated on his ability as a hustler.

Many handsome halftone portraits grace its pages, notable among them being the faces of President J. C. Wood and the lamented Helmuth.

The makeup and arrangement of contests follow the accepted custom and the contents are presented in clear, legible type.

NEWS AND NOTES.

The Minneapolis Homœopathic Medical Society meets on the second Wednesday eve of each month; Henry C. Aldrich, M. D., President; Adele S. Hutchison, M. D., Vice-President; O. K. Richardson, M. D., Secretary.

The State Medical Examining Board holds its examinations at the State Capital building in St. Paul, the first Tuesday in January, April, June and October, C. J. Ringnell, M. D., Minneapolis, Secretary. The homœopathic members are Adele S. Hutchison, M. D., Minneapolis; Thos Lowe, M. D., Slayton and A. B. Cole, M. D., Fergus Falls.

The following changes have been made in the faculty and corps of instructors of the College of Homœopathic Medicine of the University of Iowa. The resignation of Professors C. H. Cogswell and Frederick Becker have been accepted. Professor Cogswell, on account of his long and faithful services, has been made Professor Emeritus of Obstetrics and Gynecology. Frederick J. Becker, who has just returned from a year of special study in Europe, formerly Assistant to the Chair of Surgery, has been placed in charge of the Chair of Obstetrics and Gynecology. Surgical Gynecology, which, for some years, has been under the supervision of the Chair of Surgery, has been restored to the Chair of Gynecology. Benjamin R. Johnston, formerly Assistant to the Chair of Theory and Practice of Medicine has been promoted and placed in charge of the Chair. William L. Bywater, formerly Lecturer on Diseases of Women, has been elected Lecturer on Physical Diagnosis and Diseases of the Lungs; also Assistant to the Chair of Theory and Practice of Medicine. Theodore L. Hazard, formerly Assistant to the Chair of Materia Medica, has been elected Lecturer on Paedology and Assistant to the Chair of Obstetrics and Gynecology.

Dr. J. B. Mattison, Medical Director, Brooklyn Home for Narcotic Inebriates, offers a prize of 400 dollars for the best paper on the subject:

Does the habitual subdermic use of morphia cause organic disease? If so, what?

Contest to be open two years from December 1, 1901, to any physician, in any language.

Award to be determined by a committee: Dr. T. D. Crothers, Hartford, Conn., editor Journal of Inebriety, chairman; Dr. J. M. Van Cott, Prof. of Pathology, Long Island College Hospital, Brooklyn, and Dr. Wharton Sinkler, Neurologist to the State Asylum for the Chronic Insane, Philadelphia.

All papers to be in the hands of the chairman, by or before 1 December, 1903; to become the property of the American Association for the

Study and Cure of Inebriety, and to be published in such journals as the committee may select.

The Secretary of the Institute has left over a few copies of the splendid, full-page pictures of the late Dr. Helmuth and of Dr. Talcott. Any member wishing a copy for framing can procure one by sending a request to Dr. Gatchell, 100 State street, Chicago.

Dr. C. E. Groves, of Spokane, Wash., is president and the only homoeopathist in the Washington Medical Examining Board.

The \$500,000 J. Lewis Crozer Homoeopathic Hospital at Chester, Pa., laid its corner stone July 17, last.

Dr. D. H. Roberts, of Owatonna, Minn., was a recent Twin City visitor.

Dr. D. W. C. Fowler, of Aberdeen, S. D., was in Minneapolis recently and is now in the best of health.

If you are thinking of going abroad remember Dr. H. S. Paine, of Glens Falls, N. Y., who with his wife conduct parties throughout the Eastern hemisphere.

Dr. Geo. M. Haywood, formerly of Rochester, N. Y., an eye, ear, nose and throat specialist of note, has removed to Minneapolis and has opened offices at Suite 301, Medical Building, 608 Nicollet Ave.

Dr. S. A. Benson, of St. Louis, Mo., professor of hygiene and sanitation in the Homoeopathic Medical College of Missouri, was a recent visitor to the Flour City.

Dr. S. P. Meredith has removed from Grand Meadow to Windom, Minn.

Dr. D. M. Graham has removed from Windom to Le Sueur, Minn.

Hering and Dunham Medical Colleges have combined in one, to be called The Hering-Dunham College,—which has become affiliated with the Midland University—which arrangement will undoubtedly benefit the new college to which we extend congratulations on its efforts toward teaching a purer and better homoeopathy.

The hospitals of the United States have an aggregate of 600,000 beds—caring for over a million patients annually, 37,500 physicians being in attendance.

Dr. S. F. Shannon, of Denver, has removed to Sewickley, Allegheny county, Penn.

Dr. Mary Wells, of Princeton, Wis., has recently been doing post graduate work in Chicago.

Dr. H. P. Holmes, formerly of Omaha, is now in charge of a mining camp of 800 in Wyoming.

Our good friend, Kraft, of Cleveland, is arranging an ideal trip to Europe for the summer of 1903. Kraft is a genial, wholesouled man, full of business, who knows just how and when to do every thing and where to go to have a pleasant trip. His party will sail from New York early in July, going to Naples, Italy. Will tour the continent and the British Isles, returning via Liverpool to either New York or Montreal. Address Dr. Kraft, at 57 Bell Ave., Cleveland.

There was an indigent young Dr.
Called in by a woman named Prr.
With a battery he Shr.
Quite senseless he Knr.
Ten plunks was the sum that he Sr.

Rudolf Virchow, the great German scientist, died recently.

Drs. Welch, Kinley and Hart are the homœopathists on the staff of the Denver Emergency Hospital.

It is claimed that the ancient Egyptians had appendicitis and were operated for the same, as can be demonstrated on mummies.

Two so-called incurable insane patients in the Arapahoe county, Colorado hospital have recently been cured by homoeopathic treatment.

Dr. Louis Martiny, of Brussels, Belgium, died in June last. He was the founder of the Belgian Homoeopathic Review.

Dr. Rufus B. Weaver, who has for over thirty years been demonstrator of anatomy at the Hahnemann Medical College of Philadelphia, and endeared to all of its many graduates, was a welcome guest at the dinner given to the students by the faculty of the College of Homoeopathic Medicine and Surgery of the Medical Department of the State University, at the Commercial Club, Minneapolis, on Sept. 22nd.

Dr. Maurice C. Ashley, formerly first assistant physician at the Middletown (N. Y.) State Hospital for the Insane, has been appointed superintendent to succeed the late Selden H. Talcott.

Grace Hospital, Detroit, Mich., receives a bequest of \$60,000 from the late Senator McMillan of that city.

In Barcelona, Spain, the Hospital del Mino Dios, formerly allopathic, has been turned over to the homoeopathists with Dr. Savalls as physician-in-chief.

The British 20th century fund for the advancement of Homœopathy has reached the sum of \$5,000.

While in Chicago recently we had the pleasure of meeting Dr. W. E. Taylor, superintendent of the Western State Hospital for the Insane, at Watertown, Illinois, and learned that he has been appointed superintendent of the Hospital for the incurable insane near Peoria, Ill.

Dr. C. H. Cogswell, Jr., M. D., has located at Mason City, Iowa.

It is reported that a prominent Minneapolis old school specialist in the eye, who to disprove the statement of a woman patient that the medicine he had prescribed for her was harmful, drank a quantity of it, became unconscious subsequently and it required the efforts of several of his colleagues for a number of hours to restore him to consciousness again.

Sir Frederic Treves in a recent article on appendicitis, says: "The greater proportion of the cases of this disease recover spontaneously, and it is probable that the general mortality of the disease, if all grades be included, is not above 5 per cent."

Through the efforts and energy of Dr. Jas. W. Ward, of San Francisco, California, some \$85,000 have been raised for the new homoeopathic hospital in that city, which will benefit the reorganized Hahnemann College greatly. Why cannot the same thing be done in Minneapolis?

Dr. Nancy T. Williams, of Augusta, Maine, died in the Maine Insane Hospital on July 29. Dr. Williams gave more money toward the erection of the Hahnemann monument than any other person.

Dr. D. W. Horning has recently returned from his annual September outing. This year he camped with friends on Big Stone Lake and reports an enjoyable time.

Dr. E. P. Mills, Olathe, Kansas, is county physician for Johnson county.

In Munich there is to be established a chair of homœopathy in the great university of that city.

Theodor Kafka, the noted homœopathist of Carlsbad, Germany, died June 29.

The Massachusetts Homœopathic Hospital has received a bequest of \$5,000 from the estate of the late J. B. Glover.

College of Homœopathic Medicine and Surgery.

On Sept. 22, at the Commercial Club in Minneapolis, occurred the annual dinner to the students given by the faculty of the College of Homœopathic Medicine and Surgery of the Medical Department of the University of Minnesota. A large number of invited guests gathered around the festive board and discussed matters gastronomic and intellectual.

Toasts were responded to as follows: The Individuality in Men as Applied to Drugs, by O. H. Hall, of St. Paul; Using the Orbicularis Oris, by R. St. J. Perry, of Farmington, and Reciprocity in Relation to Schools of Medicine, by O. K. Richardson, of Minneapolis, all speaking to the point and drawing lessons for the benefit of the students.

Dean Williamson presided in his own characteristic genial way.

Dr. D. H. Roberts for many years a practitioner at Owatonna, Minn. has removed to Escondido, California.

Dr. Paul A. Higbee is convalescing from a two month's siege of sewer gas poisoning.

Dr. Geo. F. Roberts has been laid up with with an attack of La Grippe.

Dr. Harry Sutton has located at Cold Springs, Minn.

Dr. W. T. De Coster has moved from Wilmont to Worthington Minnesota.

Dr. O. K. Richardson has removed to his handsome new home which he has built the past summer at 1813 South Dupont Ave.

Dr. H. H. Bingham has removed from the Guaranty Building to the Pillsbury Building at the corner of 6th St. and Nicollet Avenue, Minneapolis.

Dr. A. E. Booth has returned from two mouths post graduate work in New York City.

Dr. G. B. B. Larkeque is Health officer of Athol, Mass.

Dr. Thos. Wildes of New York City is one of the medical inspectors of the Board of Health of that city.

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How to Succeed in the Practice of Orificial Surgery.

E. H. PRATT, M. D.,

CHICAGO.

Members of the American Association of Orificial Surgeons:

Ladies and Gentlemen—You know as well as I do that some men succeed at everything they undertake, while others succeed at nothing which they undertake; that all men in all walks of life can be fairly divided into two classes, viz.: those who succeed and those who fail, and this classification has nothing whatever to do with the nature of the enterprise or work undertaken.

The elements of success are identical in all undertakings and an article by myself or anybody else to one who has achieved the habit of success in whatever direction his efforts may take is entirely superfluous, so let each of you look into a glass and ask yourself the question, on general principles, "Am I a success or am I a failure?" If you have the earmarks of success about you, Orificial Surgery is safe in your hands; it will never harm you and you will never harm it. On the other hand, its practice will bring you great honor and you will honor the cause and in this way honors will be easy.

It is true, of course, that men succeed at some things and fail at others, but not to any great extent, for if one has really acquired the habit of success, his own good sense as well as his intuitions usually guide him to a happy choice in all his undertakings, and he cares little for others' advice in the matter.

But there are two classes of men to whom, perhaps, a few suggestions upon How to Succeed with Orificial Surgery may be helpful. One class is those whose professional lives have thus far been comparative failures, if any such happen to be present, and the other class will be made up of those whose professional characters are as yet so immature as to make it a matter of uncertainty whether they will be successes or failures; so the present paper is more for the help of the unfortunate and the in-

experienced in the practice of medicine than for the assistance of those who need no help, but are able to help themselves.

Let me say first, then, a few words upon the merits of Orificial Surgery and afterwards address a few remarks to the unfortunates in the practice of medicine, and then to those who stand at the threshold of their professional careers.

Upon the subject of orificial work as a means of cure my soul is full to overflowing, and if I did the subject justice from what little I know of its merits, my paper tonight would be much longer than your patience and so I must content myself with a few general remarks sufficiently brief to not be a tax upon the patience of your hearing.

The orificial thought was born in this amphytheatre about eighteen years ago last February and was promulgated with such forceful conviction that strangers called me a crank and many of my best friends considered me an enthusiast, feeling confident that in a few short years my ardor would cool down and my endorsement of the measure as a means of cure could be pushed with less vigor; but, although my nature is a sensitive one and it takes but little to discourage me, I beg leave to report to you here at the end of all these years' extensive experience with Orificial Surgery, as a means of cure, in the first place, that I plead to the charge of being a crank that I am not guilty, and in the next place I confess that if I were ever an enthusiast in the employment of Orificial Surgery I am no less so now than formerly; my enthusiasm has not cooled with the years, but on the contrary, has passed into a steady and substantial as well as an enthusiastic endorsement, which is now even stronger than ever before and which is sure to increase in ardor while my faculties remain intact and my mind remains well balanced. The orificial idea, although my own child, is no dearer to me because of its relationship and in my mind it always has, does now and always will occupy its present position of keen appreciation purely as a matter of merit. I confess to being an ardent student of forces and I respect orificial surgery for the great power it exercises over the functions and nutritions of the body. My own position in the matter, however, is not that of the author of the force, but simply its most humble discoverer. I feel a warm appreciation and have an ardent admiration for all forces that act upon capillary circulation, and hold the various measures that can flush or pale capillaries at just that degree of appreciation as they prove themselves efficient and practical in application. I have great respect for the action of drugs; I have great respect for electricity; I have great respect for both dry and moist heat and cold; I have great respect for abdominal respirations and calisthenics; I have great respect for magnetism; I have great respect for the influence of mind over matter and I have also a profound respect for the orificial

philosophy, and my admiration for all these various measures has been won and is held by the mere fact of their ability to influence capillary circulation and, through this, all bodily functions and processes of nutrition and repair.

If the endorsement of this creed constitutes me a crank, then, of course, I am "It" and will withdraw my plea of "not guilty," but my conception of a crank was a little different, as I have always understood such an one to be an unbalanced person, giving some one idea undue prominence regardless of the merits of other ideas and with an undue appreciation of his favorite conception.

As to being an enthusiast, well, perhaps so, but I have not been a liar, have not made any false claims, taken any false positions and have no apologies to offer for anything that I have said or done in the cause of the Orificial Philosophy. My first conception of the power of the work and its sphere of usefulness were not in the slightest degree exaggerated and no proposition in connection with the work has ever called for either apology or retraction. If anything, my position at the present time, if correctly stated, would be a still more exaggerated one than at first assumed, for I now believe not only that orificial surgery is the most powerful agent known to the medical profession for the cure of chronic diseases, but I believe that the appreciation and employment of the orificial idea is absolutely essential, not only to the cure of the whole army of chronic cases, but to the regeneration of the race as well, and to the prevention of disease, for it not only influences bodily circulations, functions and hence nutritions, but also is the most effective means known to mankind for the correction of mental and emotional crookedness. The application of the orificial philosophy to those who have no bodily complaints to offer seems to furnish a wholesome spiritual bath, so that the native tendency of the soul to honesty and uprightness and truthfulness and straightforwardness of thinking and feeling is able to assert itself and the white light of truth is not broken into the rainbow hue of colored lights by an imperfect medium of transmission. Remember that the great "I want;" that the impulses of our lives, our heart's desires, reach us by way of the sympathetic nerve. Remember that impingement of the nerve terminals of this system throws it out of rhythm, distorts its messages, and that their release from such impingement and their restoration to a normal condition is absolutely essential to right conceptions and right living.

If, upon thorough investigation, all this proves to be true, you will not blame me for being enthusiastic in so great a cause; but, on the contrary, wonder that my enthusiasm is not greater than it is. One thing is certain; of the thousands of doctors who have given attention to the ori-

ficial philosophy and put its methods to test, those who by experience are qualified to judge in the matter and who are warm, true personal friends, have not laid their hands upon my shoulders, looked into my face and, in the name of friendship or humanity urged me to be more conservative either in my work or teachings.

The fact that the official philosophy has been practiced with abundant success by many thousands of practicing physicians has forever settled the question about its possibilities of success if rightly employed. It is not an experiment or an untried dream, but is now a well accepted, authentic means of surgical treatment.

All you who have studied the birth, development, acceptance and adoption of medical measures by the profession will readily understand that not merely decades, but centuries must go by before the full meaning of the official philosophy will be universally recognized and appreciated by either laymen or the profession regardless of its merit, but that is not your business or mine. Our business is to do our best, guiding our pathways in life by the best light at our command and in this way keeping our consciences clear and playing well the part that belongs to us. Antagonism to the work has practically died out. It is no longer ridiculed nor anathematized, but on every hand it is eliciting honest, earnest inquiry and its permanent and perpetual growth into its legitimate rank among medical measures is assured.

That all bodily functions are controlled by peristalses; that these are controlled by involuntary muscular fibres; that the force which propels them to action is the sympathetic nerve force; that at the lower openings of the body is where this nerve force is most liable to be wasted, and that these are the only places where respiration and the circulation of the blood can invariably be stimulated and reactive powers of every part of the body successfully appealed to—in other words, that Official Surgery stops sympathetic nerve waste and is a wonderfully effective agent in the restoration of health from all forms of chronic disease, are all simple facts, easily proven in any doctor's practice and so conspicuously practical and important that their value can never hereafter be lost sight of or ignored. But let these few remarks suffice upon the subject of Official Surgery. The subject calls for a book, not merely a society paper, so let us patiently wait for the printed pages to see the whole subject treated in a thoroughly scientific and hence just manner.

If there be those among you who are so modest in your accomplishments that you are more prone to fail than to succeed with whatever measure you undertake in the treatment of the sick, I would say that Official Surgery is a two-edged tool than can kill as well as cure, so when you pick up the knife or any other pelvic instrument for employment upon the sick,

you will find it best not to be careless with it. Nevertheless, do not be discouraged, for the principles of success are identical in all forms of practice and you might as well learn how to succeed in the handling of orificial surgery as in the prescribing of drugs or the use of any other remedial measure.

Will you permit me a few suggestions? In the first place, change your focus of attention. Remember the law that we become like what we think of. The chances are a hundred to one that your mind is on what not to do instead of being on what to do. You think of failure instead of success. You act from your fears instead of your hopes and expectations. You lack the courage of your convictions. Put you on a wheel and the same philosophy would make you take a header on everything you are afraid of. So, first of all, you must learn to expect well of yourself, you must learn to be artful as well as scientific. You would better take a saw and square and compass and hammer and nails and first lay a sidewalk; then make a few boxes; then engage in more complicated forms of carpenter work until you learn how to make things fit. You can learn these principles not only in carpenter work, but in tailoring, in a blacksmith shop or in any other work, cutting apart and putting together for the construction of useful articles usually required, for the underlying principles of artistic finish and fitness of things are the same in all mechanical employments.

I mean simply this; if you wish to succeed in the practice of surgery, one of your first requirements will be the very practical faculty of common sense, which is characteristic of mechanics, and is developed by any well regulated manual training school.

If you are already sufficiently mechanical, but are unable to manage your patients to your liking, it might be a good idea for you to take a few music lessons and learn to keep the pitch, in any part you sing or play, and the rhythm as well. All life is rhythmic and the harmonies of a surgical life are certainly too intricate for any man to achieve who is unable to keep step to music or to adapt himself to whatever circumstances he may be placed in.

The secret of success is wrapped up in the practical application of the law of vibration, and if you will learn to first focus your attention and hold it steadily upon what is desirable and then study the art of adaptation and the underlying principles of mechanics, but one other thing will be necessary to change your residence from Adversity to Prosperity Street, and that has to do with your motive of action. It is absolutely necessary for any substantial success, and in the practice of medicine particularly, that you should recognize the principle that the greatest doctor is merely the greatest servant and that is best for your patient must move you to

action rather than any consideration whatever of self interest, whether it be in the way of finance or reputation. The man who starts out with an ambition to succeed merely for the sake of success will never achieve it. The only way to obtain it is to be worthy of it and then it comes without the seeking; so instead of striving for particular things, the effort should be to deserve them and then the things have to come; they cannot help it.

Try this philosophy in orificial surgery and it will serve you well, as will everything else that you undertake.

But orificial surgery in spite of its power for good, will do you harm if your employment of it be ignorant and unscientific.

To the novitiates in medicine perhaps the most important thing to suggest would be the maintenance of a level head. Go slow and do not become professionally lopsided. Do not hypnotize yourself with any idea, however big, to the exclusion of proper appreciation of other ideas, of perhaps equal, if not greater importance only appreciated by yourself because of your ignorance. Let your studies be in many directions and keep them all up at the same time. If you will insist in being a "one idea" man there is an idea of sufficient magnitude to deserve your attention, for it includes all other ideas, and that is **THE CIRCULATION OF THE BLOOD**. Capillary circulation is responsible for all building, all bodily repair and all cures are made through its agency. For this reason we should have an appreciative ear for all measures which flush capillaries.

If you find yourself more interested in one means of cure than in any other, that may prove to be your specialty of practice, but for this reason it need not monopolize your study or attention. When you overestimate any idea you do it harm instead of befriending it, and it is always better to underdo than to overdo, for in due course of time your experience will gradually lead you to do just what is right at the right time and in the right way and thereby win for you a reputation for soundness of judgment and level headedness that will stand you in good stead when your opinion upon any subject is called for. The public is not expected to know all that you know about the practice of medicine and it is not necessary for you take it into training beyond the ordinary requirements of general intelligence and knowledge. What the people want is your especial knowledge and skill and what you want is their confidence in your honesty and judgment, so let your main effort be directed, not toward obtaining it, but simply toward deserving it and then it will come without the seeking. The only way to observe it is to be fair and honest and honorable and teachable and full of service to your patrons. Do not simply pose as their friend, but **BE** their friend, and treat them as you would be treated. Do not give medicine or employ measures that you would not make use of among those who are nearest and dearest to you.

With a level and well informed head and a heart true to honorable service in the cause of humanity, you will not be a misfit in any department of medical practice and Orificial Surgery like all other good measures, will serve you acceptably. In your estimation of it you must not make the mistake of reckoning upon what others with their knowledge and experience can accomplish with it, but rather upon what you yourself can do with what you know of it. Do not try to be somebody else; just be yourself and all will be well. It takes more than an ape to succeed in the practice of medicine, it takes a MAN. So learn all you can, be true to what you know and what you, yourself, can do; give yourself to the service of your patrons and the laurel wreath of success in the practice of Orificial Surgery and with any other measure which you may see fit to employ in the healing or prevention of disease, must inevitably crown your professional efforts.

"Signal Lights."

C. E. SAWYER, M. D.,

MARION, OHIO.

It is interesting as one goes whirling overland on any of the limited night trains of the great railroad trunk lines of the country to notice the flash of the different colored signal lights which are placed at frequent intervals along the right of way. They are but little things in themselves, but in the operation of the railroads they are so important that none of the trains leaving their terminals would ever be assured of reaching their destination, safely without them.

To those inexperienced in railroading, the locomotive would naturally be thought of as the most important part of the great railroad system, but to the practical railroad men, the signal light is of as much consequence and he arranges with as much care that it should be in proper place and in as perfect condition as the great locomotive that hauls the train.

If their meaning is interpreted aright they forestall accident and prevent disaster, they protect the innocent passenger and direct the experienced engineer whose keen perception and quick appreciation is constantly on the alert for the message they convey.

So it is with the signal lights which may be found in the operation of the human system. Oftentimes they are slight in form and as compared with the greater parts of the human mechanism are insignificant in character, but still they are none the less important. If the signal is properly interpreted it helps to guide the surgeon in proper channels and prevent much of danger and disaster which would otherwise arise.

1. Read before the American Association of Orificial Surgeons, Sept., 1903.

To the least experienced in surgery the acme of success is often thought to be the performance of great operations while to those engaged in the practice it is known that the greatest good to the greatest number comes from the proper employment of details and the correct interpretation of the signal lights which Nature has placed along her right of way.

Realizing the importance of these seemingly minor matters it is the purpose of this paper to call attention to some of the newer signal lights which the progress of medical science has developed. Heretofore there has been much difference of opinion in the handling of cases of the same class. This has been due largely to a lack of appreciation of things which are apparently irrelevant to the case, but which profounder research has shown to be of vast importance.

Bacteriology, pathogenic chemistry, the law of reflexes, physical culture, hygiene and sanitation have all developed signal lights which flash a new meaning to the surgeon of today.

Up to recent times the requirements of a surgeon were largely those of ability to cut, but the present demands vastly more of him than the anatomical knowledge and mechanical skill, which begins and ends with an operation. His judgment of things must be so general as to be able to determine whether a cutting operation is necessary and if necessary, to what extent he must go, and if he performs the operation, what the probable outcome to the patient will be. The surgeon must determine what part of the organ can be removed and the balance of the body go on functioning properly.

To settle these questions most satisfactorily, he should bear in mind that conservatism is the first and most important surgical law, and he should also bear in mind that his best judgment is only possible as he the better understands the significance of all the signal lights. We must all agree that many an operation has been performed which had better have been left undone because of the serious outcome. All who have been long in surgery can count many cases which were left stranded for life because of some misapplied operation.

With the advance of science, we are less and less liable to these errors providing we watch carefully our signal lights and it is to emphasize this fact that I present this paper and the following cases. I do not cite them to discourage surgeons, or disparage patients, but I give them as examples of the necessity of precaution, of the importance of extreme care in investigating all causes of what seem to be conditions requiring surgical attention and to again emphasize conservatism in the removal of organs when operation becomes a real necessity. Unless these matters are kept in the foreground and given due consideration, errors of the past will keep repeating themselves, otherwise surgery will become more of a science with greater certainty of favorable results and less liability to criticism.

Thirteen years ago Mrs. B. was operated on by one of Ohio's old school surgeons to relieve a prolapsed ovary and overcome a severe case of dysmenorrhœa. In the judgment of the surgeon it was deemed advisable that both ovaries be removed. First, because the one was displaced and inflamed and the other because it presented a small cyst. These pathological conditions appeared to warrant the procedure and as it was thought to be a good thing to bring about the menopause and thus prevent the recurrence of the menstrual storms, the surgeon seemed justified in what he did, viz., the removal of ovaries, tubes and uterus.

Results show that he was in error. The operation so far as the cutting part was concerned was perfectly successful. The wound healed without trouble and everything seemed to be most favorable and every one associated with the case anticipated favorable results, but as week after week passed the looked for relief failed to come. The patient was still an invalid, she became extremely nervous, every few weeks she would have recurring attacks of nervousness which finally became so serious in character that she was declared insane and committed to a state asylum. This state of affairs did not supervene until after she had become a morphine fiend and had suffered all the tortures that such a complication brings. It was after three months' confinement in an asylum that she came under my care.

In my preliminary examination everything from a local standpoint so far as the operation was concerned seemed all right. There was no physical manifestations of trouble so far as palpation, bi-manual examination or speculum research showed. I soon learned that about every four weeks she had an attack of nose bleed, at times this would be slight in character but always regular in recurrence. At these times she would become entirely beside herself, often screaming and hollering so as to disturb every one within a block about her. Her pupils would become widely dilated, the cornea injected and her whole appearance one of great excitement. This had been going on year after year, the patient being blamed the while for lack of self control and wilful degeneracy.

By investigation for a cause of the trouble a careful blood count was made and showed all the elements of the blood to be subnormal, urinalysis showed a high specific gravity, high color, diminished quantity, urates in excess and oftentimes a slight trace of sugar. These findings were always better in the interim and always aggravated during the attack. With this knowledge of the case I decided that these nervous storms were the result of auto-infection. The automatic nervous mechanism whose duty it was to keep up the menstrual flow had not been removed when the tubes and ovaries were. Her menstrual clock kept on striking long after the hands had quit moving and this continued operation kept throwing

back into the system poisons which were contaminating the whole organism expressing itself in the convulsive explosion. Here was a case that had been subjected to a more extensive operation than was necessary. If even one of the tubes and a part of an ovary had been left intact this overflow would not have taken place and this patient would have been saved years of torture.

Obeying the indications of this pathologic signal light, I began a search for an antidote for the poison. Guided by the homeopathic law all indications pointed to Belladonna as the remedy, but as the stomach was always so greatly disturbed during the attacks that no medicine given by the mouth would be retained, I decided to use atrophine hypodermically and to give such baths and electrical treatments as served to help the eliminative organs to the greatest possible degree. In a few weeks the conditions began to clear up and at the end of six months the patient was perfectly well. Not only did the symptoms of the recurring attacks disappear, but the menopause seemed to be established and this too when the patient was but thirty-four years of age and after thirteen years of continued disturbance.

This case was to me especially interesting because it showed the consequence of the removal of the organs while the mechanical operation of the nerve centers still continued in the form of vicarious menstruation, second in the absorption entailed by the incompleted function and last by the influence of the antidotal treatment.

Case two was Mrs. B., who was an invalid five years, four years of which time she spent in bed. For days and days together, scarcely turning over, not being able to have her bed changed or her body bathed in consequence of an extreme weakness of which she always complained. Talking or any exercise would cause her to have an extreme sinking feeling in the region of the solar plexus and a little overexertion in this way would keep her in a most distressed condition for hours and even days at a time. At times she would seem to be gaining and her prospects for recovery would be quite flattering but all hopes in this regard were sooner or later doomed to disappointment, for in spite of all efforts in her behalf, she would continue to relapse. Her trouble first developed about two years after the birth of her last child. After trying ordinary home treatment under the family physician for about a year, the consulting surgeon was called and it was the consensus of opinion that the trouble was the result of a lacerated cervix. This was repaired and every means possible employed to bring about recovery, but she failed to be benefited. Her former history kept repeating itself, she would get up about so far and then would go to pieces. Nothing was spared to bring her case every possible help in the matter of treatment. Dietetic regimen, suggestive thera-

peutics, osteopathy, enforced rest and even compulsory exercise in turn were used for two years following the aforesaid operation but they failed to bring even temporary relief. At the end of two years it was found that a fibroid growth was forming in the uterus. Her family physician advised another operation which in due time was done and as everything seemed to indicate the necessity, a pan-hysterectomy was performed. From an operative standpoint everything did well. Not one untoward symptom presenting, but the looked for relief to former symptoms failed to come, the same old weakness, the same old nervousness and the same picture of invalidism still continued.

Analysis of the urine and careful blood test showed the same conditions as in the preceding case, viz., a greatly depurated condition of the blood and marked disturbance of the urinary elimination. More careful investigation into the history of the case showed frequent occurrence of bile in the urine, clay colored stools, tongue coated, and a fetid breath with numerous other familiar symptoms of liver and kidney incompetence.

Here was another case of auto-infection, another case demanding a remedy other than a surgical one. Noting carefully the time of recurrence of these attacks they were soon anticipated by giving small doses of Nucleo Mercury and regular doses of "Salithon," remedies which I have found of great value in all cases of infection. These remedies have been continued at regular intervals for a period of three months with occasional salt enemas.

After the beginning of this line of treatment the physical storm which had been waging for years began to subside and the patient is well on the way to recovery, another evidence of the value of signal lights which indicate the necessity of looking well into their meaning before determining upon surgical procedure. I might go on relating many similar cases, but I trust that the evidence herein submitted is sufficient at least to the end of engendering greater care in the consideration of all surgical cases, especially along the line of pathogenic chemistry, for here is to be found much of value in the treatment of all cases.

There certainly has been great advance made in the means of preliminary examinations and in consequence much that has heretofore been submerged in the darkness of ignorance is being revealed in the light of progressive intelligence and no greater strides have been made in any direction than in that of pathogenic chemistry. No one knows better than the surgeon the difficulties of the past in prognosing his cases. Much of this has been due to the fact that he has had to rely too much upon the judgment of the general practitioner or imperfect methods of examination of his own, because of his limited acquaintance with his patient.

Heretofore to become familiar with the general constitutional condi-

tion of the subject it has been necessary to be comparatively well acquainted with them and this was not often possible for the surgeon. With our present means of determining the nutritive ability of a patient by blood counts and various analyses, much that has heretofore been enshrouded in mystery may be cleared up, for by making a careful blood analysis we are usually in very good condition to judge of the nutritive functions of the patient and by urinary examination to know of the eliminative ability. There are always two sides to every case which must be considered. One is the assimilation of the individual and the other the elimination.

By blood examination we are in position to learn of the one and by examination of the excretions of the body to know of the other, and with these findings we are capable of determining the needs of the case.

It has long since been considered necessary to look after eliminative conditions as manifested in urinary disturbance, but not until recently has it been determined that poisons from other sources within the body might produce unfavorable results. The gynecological surgeon finds much in the way of nervous complications which make questionable the proper course of pursuance in the treatment in many of his cases. Investigation along the field of pathogenic chemistry will serve to eradicate much of this mystery for many of the nervous conditions found in all gynecological cases are directly traceable to auto-infection.

The limitations of this paper are such as to prevent the thoroughness in consideration of the subject to which it is entitled, but I trust that the hint given may serve to awaken greater interest and to bring to the consideration of all the possibilities of this source of information.

To such as are interested much good will be found in Bouchard's work on Auto-Infection or Haig on Uric Acid in the consideration of disease. The observation of these authors works are but forecasts of the future, but they signify the trend of things, and as Signal Lights they are worthy careful consideration.

Pathology Versus Diagnosis. A Case.

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In presenting this paper I have a two fold motive, first to present a case with multiple pathological lesions, secondly to show that diagnoses are not infallible and that as an object lesson much more could be learned if the general practitioner would trouble himself enough to go through the arduous duty of a post-mortem examination. By this I do not mean simply the opening of the abdomen and exposing the viscera, poking it here and prodding it there, and saying, "Well, I knew I was right,"

or "I told you so," but by the thorough preparation of pathological slides and the determination of what the lesions really are. By doing this the conditions present and the symptoms that have been present in the case are so associated that they all combine to form that intuitive knowledge which is of so much value to every physician. With various pathological lesions in different organs the symptoms are so complex that diagnosis becomes practically impossible and if made is with a "maybe," or perhaps, accompanied by a wise, somber look and a knowing wag of the head, but still the case remains a mystery. It is this kind of a case that makes the wise physician feel his deficiency in knowledge and to work and seek after the truth, but the other kind already over laden with alleged wisdom struts around, nothing daunted, ready at any and all times with vaporings.

Some may say, "What is the use, every case must be prescribed for according to the totality of symptoms." So far well and good but the physician who knows his symptomatology merely by rote, instead of being acquainted with the pathology which those symptoms are voicing, is blindly groping his way in the dark. It is for this extra knowledge we are making our plea. Many cases are dropped at death's door with a diagnosis perfectly satisfactory to the physician, but which further investigation would oft times prove very wrong indeed. It would simply be one more buried mistake for which there was no contradiction. A good thing for you doctors, if you can bury your mistakes but what the chagrin when discovered.

The case I have to present here is unique because of its marked symptomatology and multiple pathological lesions illustrating in fact, several of the points heretofore mentioned.

Case—Mrs. N—widow—age 65. Very fleshy, with large, pendulous abdomen. She gave a history of fairly good health up to within a few months of her last illness. At that time her husband died, causing her a severe mental shock from which she never fully recovered. It seemed the starting point for a general breaking down. The symptoms which we would expect from conditions present were either absent or unnoticed prior to this time.

She entered the hospital Dec. 18th, Temp. 98°, pulse 108. She had spells resembling hysteria major, then again would be flighty, semi-conscious, mumbling and moaning, or noisy and very nervous, then perfectly rational and quiet.

She complained of pain in the right lumbar region but it could not be well localized, it shifted and varied so that at times we thought it imaginary.

She vomited a great deal, mostly greenish material, being unable to retain much and then only the very lightest of food.

Her bowels were not active and often required an enema.

She had a yellowish, cachetic appearance, traces of œdema about the feet and hands, no ascites.

Heart and stomach areas normal, but there was a distinct mitral and tricuspid presystolic murmur.

Spleen and liver enlarged.

Respiration normal.

Urine—Slight traces of albumen, few hyaline and granular casts. Quantity 900 to 1100 c. c. Specific gravity 1.025.

Urea at times only 9 to 12 grms. P₂ 05 in ratio.

She was anemic and blood examination showed haemoglobin but 30 per cent; red cells diminished to about 2,000,000 per c. m. m. and anemic.

Poikilocytosis.

Normoblasts varying in size.

Megaloblasts.

No Microblasts.

White cells increased, mainly fine granular oxyphiles.

Eosinophiles.

Hyaline cells.

Several examinations were made but differed but little except that the haemoglobin decreased to 20 per cent.

Megaloblasts and microblasts became more prominent.

Her condition was gradually growing worse, her complexion was more yellowish, spells of dyspnoea; greatly prostrated, apparent loss of all strength; complained of numbness.

Gastric disturbances more frequent and severe but no emaciation.

At times urine was suppressed with varying degrees of delirium as before. Her temperature now ranged between 99 and 100. Pulse 90 to 108.

On Feb. 14th she died.

Being in doubt as to the diagnosis made, a post-mortem examination was held.

POST-MORTEM EXAMINATION.

Well preserved and very fat.

Has a yellowish cachectic appearance.

Large quantity of soft yellow subcutaneous fat.

Omentum very thick (1 in.) friable and studded with white nodules which were hard.

Intestines were covered with fat in which the same white nodules appeared mainly in the intestine and sigmoid.

They were very much atrophied and in places the lumen was nearly occluded by the masses of infiltrated fat.

The omentum and intestines had grown into an easily broken up and friable mass.

Spleen—large, $6 \times 3\frac{1}{2} \times 1\frac{1}{2}$ in. with 4 distinct notches.

Surface smooth and pale in color.

Consistency soft and interior appears normal except that it was light red rather than dark.

Left kidney—smaller than normal and pale in color.

Capsule somewhat adherent.

Perinephritic fat very abundant.

Cut surface pale and between the pyramids and pelvis are masses of fat.

Cortex and medulla bear normal relation to each other.

Right kidney very small—Capsule partly adherent. Top and inner part of top separated from its attachment.

Ureteral opening very near place of adhesion from previous nephroraphy.

Perinephritic fat very abundant—Pelvis surrounded by masses of fat.

Cut surface—pale—Medulla and cortex bear normal relation.

Stomach normal with some thickening of pylorus.

Pancreas one mass of fatty white nodules.

Liver large and slightly firmer than normal.

Surface smooth except under surface which is adherent to omental fat, studded with white hard nodules, varying in size from pin head to $\frac{3}{4}$ in. in diameter.

Gall bladder atrophied and filled with one large gall stone (1 in. \times $1\frac{3}{4}$ in.)

Uterus is infantile and studded with nodules.

Heart—normal in size but covered with thick layer of fat.

Muscles flabby—cavities small.

Aortic semi-lunars normal.

Mitral valve thickened with calcareous deposit but not rough, cordae tendinæ thickened.

Tricuspid also thickened with deposit on leaflets.

MICROSCOPICAL.

The microscope reveals in the kidneys a chronic parenchymatous nephritis of the second stage, or small white kidneys with interstitial thickening.

Tubular structure partly destroyed also malpighian bodies. Choked tubes with considerable contraction.

The nodules of the mesentery intestines, liver, pancreas and uterus are carcinomatous.

DIAGNOSTIC SUMMARY.

1. Gall stone.
2. Beginning Mitral and Tricuspid stenosis.

3. Chronic parenchymatous nephritis.
4. Carcinoma of liver, pancreas, omentum, mesentery intestines and uterus.
5. Pernicious Anemia.

This is a case which was baffling in its diagnosis and whose death certificate was signed as pernicious anemia. Gall stones were not suspected as the symptoms were not prominent enough to cause any special notice. The disturbance of the intestinal tract was attributed to the anemia.

The chronic parenchymatous nephritis was an annoying condition during her later days, frequent urenic symptoms showing at intervals and were controlled with difficulty.

The heart murmur was not truly characteristic of mitral or tri-cuspid stenosis, because the deposits were just beginning, giving us still a fairly free blood current from the auricle into the ventricles without the entire loss of the second heart sound. Consequently the murmur at the time was taken for an anemic murmur, and no doubt this condition had its influence.

The carcinomatous condition was not suspected in the least and certainly caused surprise and a part of the aforesaid chagrin mentioned but thank the Lord the lesson was well taken and one more grain of caution added.

Our confession is open and free to criticism. What was not known before death was found out afterwards and I am sure that the time spent will be some day well repaid; at least that is the theory I am working on. To be a good physician one must be a good diagnostician, to correctly diagnose you must understand combined pathology and symptomatology.

To do this requires a study not only of symptomatology but of pathology as well. Then and not until then will you be able to keep up with the onward march of progressive medicine.

Bisection Method in Uterine Fibroid.

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Report of a Case.

In performing vaginal hysterectomy for fibroma I soon learned that it was as safe to remove a tumor by segmentation as in its entirety; and therefore successfully removed tumors larger than an infant's head by the vaginal route and with less shock to the patient than by laparotomy. I learned also that a portion of a capsule or sac could be left adhering to surrounding tissue. These facts led me to apply the bisection method to large tumors by the abdominal route, and with most gratifying results. Others, undoubtedly, have arrived at the same conclusions. In fact we have seen Dr. E. H. Pratt apply this method for several years,

and have learned that it has been practiced by Dr. Howard A. Kelly since 1894. Martin of Berlin removed tumors by morcellment, but after the application of the rubber ligature. We are not told what he would have done in a case like the following where no ligature could be applied before enucleation of a portion of the fibrous mass.

The case to be reported here will show the method better than it can be otherwise described. The patient had placed herself in the hands of a well known surgeon, who had opened the abdomen over a fibroma so large that the incision which he made from the pubes to five inches above the umbilicus did not reach the upper border of the tumor. He had found it so crowded against the pelvic walls, and so adherent in every direction, that after due exploration he abandoned the idea of removing the tumor and closed the abdominal wound. Six months later the patient was brought by her family physician to our Brooklyn Memorial Hospital with the understanding that her burden should be removed at all hazards, as the pressure symptoms were becoming unbearable. She was also encouraged by the hope of a successful operation through the employment of the newer method of bisection and morcellment. Accordingly after seven days of preparation the operation was performed as follows:

The abdominal incision was made along the median line a little to the right of the former well healed incision, and of the same extent as that, measuring about eighteen inches. The peritoneal covering of the tumor and lining of the abdominal walls were glued together by plastic adhesion caused in part by the previous operation. These were broken for about three inches to either side of the incision and the omental adhesions released, giving a free presenting surface to the tumor. The extent of intestinal adhesion could not be determined, neither could the ovarian and uterine arteries be reached, until the center of the mass could be enucleated, which we now proceeded to do, intending to leave a thin layer of the tumor upon the bowel wherever intestinal adhesions should be found. Thus all tearing of intestinal wall would be avoided, as well as time saved, and the amount of handling lessened. An incision was accordingly made in the fibroid tissue from before backward and downward. No large vessels were encountered in the tumor, and the slight oozing was conquered by a 6 per cent solution of Hydrogen Peroxide. Over one portion of the tumor to the right receded the only free portion of the uterine wall, allowing a convenient landmark to the ovarian artery of that side. This uterine tissue was held by a stout double tenaculum, while the incision was continued through half the extent of the tumor posteriorly, and as far as the adhesions of the vesicular peritoneum below. Beginning at the base of this bisected mass the fibroid tissue was peeled by the fingers, or cut away by blunt pointed scissors

from within outward. On the right side a cyst was encountered and evacuated, and on the left side, pressing well up under the floating ribs, was one segment which had undergone calcareous degeneration and was much heavier than the other portions of the tumor. Continuing the dissection downward, the uterine artery of the right side was now clamped, which checked some bleeding that might have proved troublesome. A mass as large as an infant's head was next removed from the left iliac fossa, after which the left uterine and ovarian arteries were discovered lying to the right of the median line posteriorly. After these were secured the balance of the tumor was rapidly and safely enucleated down to the cervix and was now transversely severed from it. The remaining uterine tissue on the right, and capsule on the left, were then severed from their adhesions to the intestines and abdominal peritoneum, leaving parts of the capsule as needed to protect the intestine. Up to this point the intestines had not been handled, as they were buried under the outer capsule of the tumor and uterine wall. The cervix at the point of severing from the tumor was now covered over with peritoneum, and sutured with catgut in the manner usual in official surgery. The uterine arteries were tied after removal of the clamps. The tubes and ovaries were found buried in adhesions; but as the operation had been long and the patient was receiving saline infusions to overcome shock, of which she had shown signs for some minutes, no attempt was made to release them. The wound was therefore closed as rapidly as possible, and the abdominal cavity was filled with saline solution. At the lower extremity of the abdominal incision over the bladder, on account of oozing from the severed adhesions here, an opening an inch in length was left for a packing of silk. In an hour after the patient was placed in bed her pulse could be counted rating 120 a minute. She gradually and surely reacted from shock until 12 hours later her temperature had reached 103. This soon fell to 100, where it remained for several days, with the pulse 104. She made an uneventful recovery. The bowels began to move in 18 hours. She had no nausea nor pain, and simply complained of feeling hungry and "vacant." The tumor fills a glass jar measuring 39 inches in circumference and $21\frac{1}{2}$ inches in height.

Six Hundred Points on Ulcers.

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Concisely defined, an ulcer is a solution of continuity of the skin in which there is a total loss of tissue. In size, shape and other attributes, ulcers vary, and that the student and practitioner may have at hand a means of quickly and readily identifying the various forms the appended table has been compiled. While the question of diagnosis is a matter of pride with the surgeon, the part of most interest to the patient is the cure. He cares not whether his "old sore" be of constitutional or local origin, whether specific, traumatic or idiopathic; the result is what is uppermost in his mind, and the man who produces the desired result is the man whom garrulous tongues praise at the corner grocery, in the G. A. R. hall, around the post office and throughout the country generally.

The successful treatment of ulcers consists of first establishing healthy granulations, and second in maintaining them until a complete healing of the parts has been effected. To arouse indolent ulcerating surfaces often requires severe measures, especially when they have been allowed to run for years untreated, or where they have been through certain routines of treatment until they seem to have learned to tolerate and ignore ordinary methods of stimulation. The plan to be followed in any given case depends upon the existing conditions, taken into consideration with the history and past behavior of the ulcer.

Temporizing with an old offender is a waste of time, energy and money, and it is better to clean out the ulcerating surface completely by curettage, cut away the edges, and start anew from a freshly created ground. These points must be decided by the surgeon in charge, as his experience and judgment dictate. Some cases need only the mild stimulus of hot or cold water applications, or of blisters; others need the support of strappings of adhesive plaster or the elastic pressure of the rubber bandage. Still others demand crucial incisions of the ulcerating surface, and some have to be gone after rough shod with the knife and curette, as stated above, scraping out all granulations, debris and infiltrated tissues until a basis of healthy flesh is laid bare.

Having once aroused the energy and life of an ulcer my custom has been to promote healthy granulations as much as possible under a dry dressing, and for this purpose reliance is chiefly placed upon the iodine compounds—iodoform, aristol and iodosyl. Where patients object to iodoform, and can afford it, I use aristol or iodosyl. In fact I prefer

them to iodoform; the percentage of iodine is sufficient for all needs, there is none of the disagreeable odor, they are cleanly and the results obtained are equal, if not superior, to those following the use of iodoform.

Occasionally an ulcer needs feeding; the granulations do not seem to be able to get nutriment enough from the capillaries, and in such cases local applications of Bovinine, nuclein powder or normal salt solution seem to materially assist the healing process. Once in a while we meet cases requiring the establishment of new centres of granulation and these we supply by skin grafts; some are helped along wonderfully by supplying the granulations with a frame work throughout which they can ramify and over which they can grow, and here we resort to sponge grafting. Others may demand a plastic operation to cover the deficiency, especially where the healing is apt to bring about deformity. Very rarely now do we encounter ulcers demanding amputations, though such things were not unusual in pre-antiseptic days.

Two mixtures which have proven of immense value in my work, both private and hospital, are what I call the C. A. G. Mixture and the B. A. V. Ointment. The following is the formula of the

C. A. G. Mixture.

℞ Camphor powd.

Acid Carbolic Cryst, a.a. ʒi

M with heat, and to f ʒi of this add

Glycerine, f ʒiii.

M. Shake well.

Sig. Apply locally to stimulate granulations..

In hospital and dispensary work, where the worst cases of ulcers are met with under the poorest possible hygienic conditions, this mixture has produced wonderful results in old chronic cases that had for months been regular visitors to the clinics. This is the composition of the

B. A. V. Ointment.

℞ Bismuth Subnit, ʒii.

Acid Salicylic, ʒi.

Vaseline, lb I.

M Sig. Use locally.

In cases of eczematous inflammation around an ulcer this has promptly subdued the irritation; also in cases where there was much hyperemia, erythema or other forms of eruption. It will relieve itching and congestion very quickly.

The constitutional treatment and direct internal medication in all cases of ulcers is a matter of utmost importance. Use the best possible means to build up the general health of the patient,—cod liver oil preparations, good nutritious food, and appropriate tonics. Fight whatever

diathesis or constitutional disease may exist. There are many remedies which when given internally have a direct action upon the skin, and quite a few of these are capable of exerting a good influence upon ulcerations. *Hepar Sulph.* (Calcium Sulphide) and *Silicia* are two drugs which act as "blanket" remedies in suppurating conditions. *Aconite* is a good remedy in all ulcers where there is much inflammation or congestion of the parts, with itching, stinging, burning pains. *Arsenicum alb.* is of great importance in the treatment of malignant ulcerations and is of benefit in those cases where there is a scaly eruption around or near the ulcer. *Calcareo Phosph.* has proven of value in ulcers upon persons of a scrofulous diathesis; also in ulcers involving bone tissue.

One of the popular remedies for all ulcerations is common powdered charcoal applied as a "poultice" to promote healing and to deodorize the discharge. *Carbo veg.* is a good remedy in ulcers arising from lymphatic degeneration, with malodorous discharge and a tendency to the hemorrhagic form. *China officinalis* is a remedy for ulcerations about the genitals in persons suffering from chronic malarial intoxication. The use of Quinine Sulphate as a dressing for ulcerations has been quite common for some years. *Eucalyptus* is recommended both internally and locally in foul, indolent and scrofulous ulcers. It is certainly beneficial when used topically in the form of the oil. *Kali bicrom.* is used in those forms where the ulcer is deep cut, punched out, with regular edges. *Kali iodat* is beneficial in syphilitic ulcers and in those due to the abuse of mercury. *Kreosotum* is applicable where there is a burning pain in the ulcer and the discharge is acrid, ichorous and corroding pus.

In any and all ulcerations where there appears a phlebitis give *Lachesis* and the inflamed veins will subside quickly. The various preparations of *Mercurius* have been long used in ulcerations of a scrofulous or syphilitic nature; in fact they are the most successful of our internal remedies for these conditions. *Natrum carb.* is indicated in ulcers with itching, burning, prickling, with inflamed areolæ and surrounded by a dry, rough skin. *Natrum mur.* has been used in those superficial ulcers of an angry appearance but without much suppuration or other irritating symptoms. *Phosphorous* is the remedy for ulcers, usually of a fistulous nature, leading down to diseased bone tissue. *Pulsatilla* applies to chilblains and the ulcerations subsequent thereto. It is also useful in varicose ulcers. *Secale*, commonly known as *Ergot*, is of use in the bleeding sores of older people who have a tendency to purpura and gangrene. In the treatment of scrofulous and varicose ulcers *Sulphur* exerts a splendid influence, also in all ulcers where there is much suppuration or where there is a tendency to lymphatic glandular involvements. *Thuja* is the indicated remedy in ulcers with excessive formation of granulations, cauliflower growths or "proud flesh."

These are only a few of the many remedies which exert a healing influence upon ulcerations; to go into the details of others not in such general use as those enumerated would involve the writing of a volume. In using these remedies it is well to bear in mind that you are dealing with a trouble which tends to chronicity and which is most decidedly obstinate. Give your chosen remedy plenty of time to act and be satisfied with reasonable improvement. "Push a good thing along, but don't shove." Incidental to the treatment of any ulcer, keep the general health up, supply a nourishing diet, keep the bowels freely open and see to it that the kidneys are not inactive.

Origin.	Local.	Constitutional.	Constitutional.
Class.	Healthy (type).	Inflammatory.	Inflammatory.
Variety.	None.	Weak.	Eczematous.
Synonyms.	Simple.	"Proud flesh." Fungus Ulcer.	Any form of ulcer may become eczematous.
Size.	Varies.	Usually less than an inch.	Varies.
Shape.	Varies.	Irregular.	Varies.
Location.	Varies.	Commonly on lower part of the shin.	Varies.
Surrounding Skin.	Slight hyperemia close to margins. No edema.	Hyperemia; swelling—Oedematous.	Eczematous.
Cause.	Usually due to traumatism.	Excessive growth of granulations.	Breaking down of congested capillaries.
Edges.	Regular with three zones of color—white, blue and red, shelving down to surface.	Sharply cut and abrupt.	Usually sharp cut and abrupt.
Surface of Sore.	Slightly depressed; studded with small red granulations.	Raw and sloughing without granulations.	Red and sloughy.
Base.	Soft and not adherent to deeper tissues.	Swollen and oedematous.	Varies with original ulcer.
Constitutional Symptoms.	None.	None.	None.
Discharge.	Thick creamy pus, or of a serous nature.	Thin and acrid; often bloody.	Abundant, yellow serous, alkaline, stiffens cloths wet with it.
Pain.	None.	Painful.	Occasionally painful.
Age of Patients.	Any age.	Any age; commoner in old age.	Any age.
Diatheasis.	None Special.	None special.	None special.
Rapidity of Growth.	Does not enlarge.	Rapid.	Slow.
Diagnosis.	Easily made from other Ulcers.	From phagedenic.	From similar skin diseases.
Prognosis.	Heals readily.	Good, but slow.	Fair, slow.
Treatment.	Same as for a simple healing wound; cleanliness and antiseptic applications. Iodoform, Aristol, Iodocyl.	Rest of affected part; warm applications, astringents, saline laxative freely, C. A. G. mixture, Thuja.	Treat eczema and ulcer separately. B.A.V. ointment. Ars. iodide internally.

Constitutional.	Constitutional.	Constitutional.	Constitutional.
Syphilitic.	Syphilitic.	Syphilitic.	Syphilitic.
Primary.	Secondary.	Superficial Tertiary.	Deep tertiary.
Hard Cancer, Initial Lesion of Syphilis.	Fox, Lues, "Old Hal."	Fox, lues, "old ral," etc.	Fox, lues, "old ral," etc.
Small and Single.	Irregular.	Irregular.	About one inch in diameter.
Round.	Round, Oval, Kidney or Horse-shoe.	Irregularly round, crescentic or annular.	Rounded.
Genital organs, lips, fingers, anus, etc., occasionally elsewhere.	Any place; mostly on parts exposed to bruises.	Anywhere, usually on body and protected parts.	Anywhere; usually on limbs near the joints.
Not involved, perhaps hyperemic.	Normal.	Normal; occasional red areola.	Dusky red border.
Exposure to syphilitic virus in any way.	Bruises of Syphilitized Tissues.	Bruises, scratches, etc., or from rapia.	Breaking down of gummata.
Sloping, flat or round, elevated and callous.	Regular; reddish or violaceous color.	Regular, abrupt.	Abrupt, deep, "punched out."
Red, livid, coppery, glossy and lardaceous appearance.	Brownish red.	Red, granulations small or absent.	Covered with elongated gummy deposit.
Hard.	Infiltrated.	Level.	Deeply excavated, uneven.
Usual syphilitic symptoms follow.	Syphilitic.	Syphilitic.	Syphilitic.
Thin, scanty, glyceric like, highly contagious.	Pus and Blood, Brownish Crusts.	Greenish yellow pus; blood; often offensive; brownish black cystic shell crusts of rupial character.	Pus and blood, often offensive.
Not painful.	None unless irritated.	None unless irritated.	None.
Any age.	Any age.	Any age.	Any age.
None.	Syphilitic.	Syphilitic.	Syphilitic.
Indolent, slow to heal.	Slow.	Rapid at first.	Rapid at first. May involve bone tissue.
From Chanoroid.	From Lupus, Syphilitic History, rarely seen.	From non-syphilitic ulcers.	From strumous ulcers.
Follows syphilitic course.	Fair.	Fair.	Not encouraging.
Centerise and apply vulvular applications. Put patient on anti-syphilitic treatment.	Anti-Syphilitic.	Anti-syphilitic.	Antisyphilitic.

Origin.	Constitutional.	Constitutional.	Constitutional.
Class.	Tubercular.	Tubercular?	Tubercular?
Variety	Lupus.	Rodent.	Epithelioma.
Synonyms.	Lupus Exudens, L. Voxar L. Erythematodes.	Ulous exudens; cancerous and canceroid ulcer; Jacob's ulcer.	Skin cancer, Marjolin's malignant ulcer.
Size.	Irregular.	Irregular.	Irregular.
Shape.	Irregular.	Irregularly oval.	Variable.
Location.	Most frequently on nose, upper lip, cheek and pudendum.	Cheeks, eyelid, nose, upper lip, scalp, nipple, vulva and anus.	Any place, frequently on lips, eyelids, nose, anus, vulva, prepuce, scrotum, back of hand.
Surrounding Skin.	Inflammatory; dull red areola.	Small flat tubercles near ulcer. No infiltration.	Hardened, thickened and infiltrated.
Cause.	Irritations of Skin.	Irritation of some tubercular or scaly spots of long standing.	Irritation of warts, cleatorices, old sores, fissures, etc.
Edges.	Abrupt, irregular, sometimes elevated or thickened, soft and rarely undermined.	Abrupt, tough, raised, hard, not everted or undermined.	Raised, hard, everted, nodular, warty and irregular.
Surface of Sore.	Granulations absent or else coarse and dark colored, often scabbed over.	Smooth, dull reddish yellow, dry and glossy.	Ulcerations of varied colors.
Base.	More or less level.	Tough and hard.	Uneven, concave, hard, warty, nodular and fissured.
Constitutional Symptoms.	No glandular affection or cachexia.	Usually good health.	Anemia; cachexia; glandular involvement.
Discharge.	Crusts bluish brown mixed with yellow.	Very scanty and no odor.	Scanty, thick and stringy, scabs over.
Pain.	No pain.	Some, but slight.	Severe.
Age of Patients.	Usually in children of poorer classes.	Rarely before 3 years, usually 50 to 60.	Advanced life usually.
Diathesis.	Tubercular, Scrofulous or Scorbutic.	Tubercular?	Tubercular?
Rapidity of Growth.	Slow.	Slow; grows equally in all directions.	Slow.
Diagnosis.	From Syphilis, Epithelioma and Rodent Ulcer.	From epithelioma and lupus.	From lupus and rodent.
Prognosis.	Fair, Guarded.	Good—guarded.	Poor, guarded.
Treatment.	Cod Liver Oil and Tonics. Locally mild caustic stimulants; X-Rays; followed by iodine compounds.	Arsenic or zinc chloride in caustic applications; followed by vulnerary applications.	Cod liver oil and blood making tonics, arsenic, zinc chloride or other strong caustics, followed by poultices and vulnerics, X-rays.

Constitutional.	Constitutional.	Constitutional.	Constitutional.
Diathetic.	Inflammatory.	Diathetic.	Diathetic.
Gouty.	Cold.	Strumous.	Scorbutic.
Rheumatic Ulcer.	Ulcerating Chilblains.	Scrofulous sores.	Scurvy ulcers.
Usually small.	Large.	Small when single, large when coalesced.	Irregular.
Irregularly round.	Irregularly round or oval.	Oval singly; irregular when coalesced.	Irregular.
Occurs in gouty parts and over gouty deposits.	Fingers and Toes.	Neck, groin, knee, elbow, wrist, ankle; often multiple.	Any place.
Sometimes indurated.	Not affected.	Slightly reddened.	Bluish, livid, hemorrhagic extravasations over body.
Irritation and inflammation of deposits.	Feeble capillary circulation; cold; bruises.	Irritation of scrofulous enlarged glands.	Exposure to cold. Lack of fresh meat and vegetables.
Shallow.	Regular; shallow.	Undermined; dark bluish color.	Regular.
Red and yellowish with chalky mixture appearance.	Very few or no Granulations. Color livid or pale.	Large yellow oedematous granulations which bleed easily.	Covered with crusts and blood clots.
Apt to be hard and chalky nature.	Smooth, level.	Soft and elevated.	Level.
Gouty.	No special.	None special.	Weakness and exhaustion.
Leaves a chalky deposit.	Pus—very little; almost dry.	Thin greenish pus.	Pus and blood.
Painful.	None.	Usually none.	None usually. Pain in joints.
Adult or old age.	Youth and adult.	Childhood or early adult life.	Any age.
Gouty-Rheumatic.	Occurs with menstrual troubles; feeble circulation, cold hands and feet.	Scrofulous.	Scorbutic.
Indolent.	Indolent.	Slow.	Indolent.
Concurrent with Gout.	From Chilblains.	Readily made by history of glandular enlargements.	History of scurvy. Rarely seen now.
Good.	Good.	Good.	Good.
Treat the Gout, clean surface of Ulcer with light Curettage; apply iodine compounds.	Stimulate Capillary Circulation. Apply C. A. G. Mixture.	Cod liver oil. Iodine internally, curette ulcer; apply Iodoform, Iodosyl or aristol.	Fresh vegetables and meat, tonics locally mild stimulants, C. A. G. mixture.

Origin.	Constitutional.	Constitutional.	Local.
Class.	Inflammatory.	Inflammatory.	Inflammatory.
Variety.	Senile.	Exuberant.	Varicose.
Synonyms.	Senile Gangrene.	"Proud flesh."	Chronic sore, broken veins, "old sores," congested leg.
Size.	Irregular.	Varies; usually small.	Varies, usually large.
Shape.	Irregularly round or oval.	Irregular.	Irregularly round or oval.
Location.	Usually on legs and feet.	Varies.	Mostly on leg.
Surrounding Skin.	Dry and pale; arteries atheromatous.	Usually normal.	Scaly, hard and indurated; often eczematous.
Cause.	Bruises, cold and gradual breaking down of capillaries.	Excessive granulations.	Bruise or chronic eczema over varicose veins.
Edges.	Not clear out.	Irregular, sharply cut overlapped with granulations.	Abrupt, elevated and bluish.
Surface of Sore.	Reddish yellow.	Elevated, fungoid, weak translucent granulations.	Depressed yellowish gray with granulating spots.
Base.	Level.	Soft.	Hard and callous.
Constitutional Symptoms.	Febrile symptoms, occasionally General Debility.	None special.	None special.
Discharge.	Pus; foul odor.	Thin pus and bloody.	Pus and blood, occasional bleeding from opening new veins.
Pain.	Anaesthetic at exact point of ulcer; pain in surrounding parts.	Painful.	Not usually painful.
Age of Patients.	Old and withered persons.	Any age.	Old age, pregnant women, and those who are on their feet much.
Diathesis.	None special.	None special.	None special.
Rapidity of Growth.	Rapid at start.	Rapid; granulations grow freely.	Slow.
Diagnosis.	Age of patients facilitates.	From cancer by their softness.	Varicose veins involved make diagnosis easy.
Prognosis.	Poor—Guarded.	Good.	Fair—guarded.
Treatment.	Good nourishing diet, tonics, locally mild soothing applications. Healing occasionally causes other troubles to develop.	Thuja locally and internally. If very exuberant trim away "proud flesh" and apply iodine compounds.	Tonics and nourishing diet. In old cases curette base, trim the edges, support veins and apply stimulating vulnerics. C. A. G. mixture.

Local.	Local.	Local.	Local.
	Any form of ulcer may become hemorrhagic.	Any form of ulcer may become neuralgia.	
Oedematous.	Hemorrhagic.	Neuralgia.	Indolent.
Watery, Weak, Flabby.	Bleeding, Bloody.	Irritable.	Callous, sore shin.
Varies.	Varies.	Varies.	Varies.
Varies.	Varies.	Varies.	Varies; usually regular in outline.
Any place, often connected with diseased bone.	Any place.	Any place, but commonly on leg.	Usually on the shins.
Normal, sometimes slight red areola.	Usually normal.	May be dotted with red, elevated, hard, inflamed and painful pimples.	Hard, infiltrated, dusky scaly epithelium coming up to edges of ulcer.
	Excessive granulations with weakness of capillary walls.	Frequently local irritants or to gastro-intestinal irritations.	Injuries in the debilitated.
Usually partly cicatrized. Granulations may overlap edges.	Thickened and sometimes indurated.	Thickened and indurated.	Abrupt, elevated, bluish.
Granulations pale, flabby, infiltrated and easily broken down; sometimes fungoid, but not as firm as in malignant growths.	Varies; usually normal granulations; dark, purplish color.	Varies with original form of ulcer.	Depressed, yellowish gray with red granulating spots.
Soft and spongy.	Varies according to original form of ulcer.	May become thickened and indurated. Has sensitive spots scattered over it.	Hard and callous.
None special.	None special; excessive hemorrhage may cause anemia.	Febrile reaction and loss of appetite.	Usually none.
Watery, few pus cells and corpuscles; like fibrous matter.	Bloody pus; occasionally almost pure blood.	Pus.	Pus; rarely bloody.
Not painful; usually slight numbness.	Usually none.	Intense and sharp, sometimes burning.	Anaesthetic.
Any adult age.	Any age.	Any age.	Usually in middle aged laborers, occasionally in aged persons.
None special.	Scurbutic and hemorrhagic, vicarious menstruation and amenorrhoea.	None special.	None special.
Slow.	Slow.	Slow.	Very slow.
From malignant by oedema of granulations.	Easily made by the bleeding.	Easily diagnosed by pain.	By hard calloused edges and surrounding skin.
Good.	Good.	Good usually.	Fair—guarded.
Scarify granulations. Apply stimulants. Anhydrous glycerine paste, C. A. G. mixture.	Tonics, Cod Liver Oil, treat concurrent disease. Locally adrenalin solution and iodine compounds, elastic bandage.	Treat original form of ulcer and apply locally chlorotone, orthoform, cocaine with iodoform.	Ourette base, trim away edges, apply stimulants, iodoform, iodosyl, aristal, with C. A. G. mixture.

Origin.	Local.	Local.	Local.
Class.	Inflammatory.	Inflammatory.	Inflammatory.
Variety.	Phlegmonous.	Phagedenic.	Gangrenous.
Synonyms.	Suppurating ulcer.	Perambulating festid, sloughing.	Bed sores, bed gangrene.
Size.	Varies.	Varies and increases.	1 to 4 inches.
Shape.	Varies.	Irregular.	Irregularly round or oval.
Location.	Any place.	Any place.	Over bony prominences.
Surrounding Skin.	Swollen, red, hot and painful.	Swollen, dusky, hot, painful.	Inflamed.
Cause.	Irritation of some other form of ulcer.	Continued irritation of phlegmonous.	Long continued irritation and pressure upon debilitated parts.
Edges.	Smooth and livid.	Irregular, abrupt, spread by sloughing.	Regular.
Surface of Sore.	Intense red, then dusky, and finally ashen.	Ashen hue; covered with slough.	Red and yellow.
Base.	Soft and not fixed.	Deeply excavated.	Soft.
Constitutional Symptoms.	Febrile symptoms may develop.	Febrile symptoms may develop.	Febrile condition exists.
Discharge.	Thick bloody pus with debris of broken down tissues.	Serous, bloody pus and gray sloughs.	Pus and blood.
Pain.	Pain in ulcer and surrounding skin.	Pain in ulcer and surrounding skin.	Painful.
Age of Patients.	Any age.	Any age.	Any age.
Diathesis.	None special.	None special.	Occurs only during long debilitating sickness.
Rapidity of Growth.	Rapid.	Rapid; spreads laterally and deepens.	Rapid at first.
Diagnosis.	By history of ulcer.	History and sloughs.	Easily made by location and concurrent sickness.
Prognosis.	Good—Guarded.	Poor—guarded.	Fair—guarded.
Treatment.	Calcium sulphide, locally O. A. G. mixture, iodine compounds.	Calcium sulphide. Locally O. A. G. mixture, iodine compounds.	Treat concurrent disease, apply iodoform and balsam peru. Prevent by washing with formaldehyde or alum solutions.

Local.	Local.	Local.	Local.
Traumatic.	Any ulcer may become diphtheritic.	Venerial.	Inflammatory.
Parasitic.	Diphtheritic.	Chancroid.	Perforating.
Chigoe Sores.	Groupons.	Soft chancre.	
Small—multiple.	Varies.	Small; may be multiple.	Very small.
Round or Oval.	Varies.	Irregularly round.	Round.
Usually on feet and legs.	Any place.	Gonital organs; occasionally on hands.	Under metatarsal heads, or under the heel.
Healthy.	Erythematous.	Somewhat inflamed.	Red areola; cold anaesthetic and with profuse perspiration.
Fulcr penetrans.	Exposure to diphtheritic infection.	Infection from another chancroid.	Traumatism.
Clear out; shallow.	Vary.	Sharply out; eroded; irregular; undermined.	Sharp out and very deep.
Red and yellow granulations.	Covered with whitish fibrous false membrane mixed with blood and debris of ulcerating tissue.	Depressed; uneven; dirty yellowish, whitish or grayish.	Sinus like: red and pussy.
Soft.	Varies according to original ulcer.	Soft.	Inflamed or necrosed bone.
None.	Febrile Symptoms.	None.	None.
Pus and Blood.	Taken up in the membrane.	Abundant, yellowish, purulent, and highly contagious.	Slight; pus, serum or blood.
Slightly painful; walking aggravates.	Varies.	Painful.	Painful.
Youth and early adult life.	Any age.	Any age, usually early adult life.	Adult life.
None.	None.	None.	None.
Spreads rapidly.	Membrane grows rapidly.	Rapid at first.	Indolent.
Presence or history of parasites.	By membrane from Phagedenic.	From hard chancre and herpes perputialis.	Location, history size and shape.
Good.	Good—Guarded.	Good.	Good.
Remove Parasites. Apply iodoform and balsam peru.	Antiseptics to kill germs, C. A. G. mixture. After death of membrane treat the original ulcer.	Cauterize with acid, cleanse with hydrogen peroxide and apply iodine compounds.	Treat diseased bone, curette and pack with iodoform, iodosyl or aristol. Phosphorus internally.

MINNEAPOLIS HOMOEOPATHIC MAGAZINE.

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EDITORIAL.

Peritoneal Adhesions.

The adhesions of the peritoneal surface after abdominal operations are a great bugbear to the surgeon—and inasmuch as experimental operations on dogs do not result in so many adhesions, we must recognize the necessity of frequent change of position after cœliotomies to prevent the formation of adhesions—also the use of physostigmine salicylate hypodermically, to stimulate peristalsis as 'tis well known that there is a paralysis of peristalsis which allows adhesions to form. When adhesions have been ruptured the peritoneal edges should be stitched together whenever possible and abdominal massage should be made use of as well. Do not use animal membranes to cover denuded surfaces, as they act as foreign bodies and produce what they were intended to prevent.

Anoka Sanatorium.

On a recent visit to Anoka we were extremely pleased to find both Dr. J. F. Kline and his assistant, Dr. A. T. Caine, as busy as beavers.

Dr. Kline has built through the past summer a commodious three-story sanatorium building, with thirty private rooms on the second and third floors, commodious offices and living rooms, parlors, dining room and kitchen, on the first floor; communicating with the offices are large

rooms for electrotherapy, fully equipped with all the latest appliances; also bath rooms for giving all sorts of hydrotherapeutical treatments. All in all, the new building is a great advantage to the city of Anoka, one that its citizens can take great pride in pointing out to their visiting friends, and one which the homœopathic physicians of the state can remember when their patients need sanatorium care.

BOOKS.

BOOKS.

THE INTERNATIONAL TEXT BOOK OF SURGERY, by American and British authors, edited by J. COLLINS WARREN, M. D., LL. D., Professor Surgery in the Harvard Medical School, etc., and A. PEARCE GOULD, M. D., F. R. C. S., Surgeon to Middlesex Hospital; Lecturer on Practical Surgery and Teacher of Operative Surgery, Middlesex Hospital Medical School, etc. Vol. II. Regional Surgery—with 471 illustrations in the text and eight full page plates in color. Philadelphia; W. B. Saunders & Co., 1900.

The scope of the volume is completeness itself, as is demonstrated in the long list of topics treated of at length by an array of writers whose ability and distinction cannot be gainsaid; and the value of the separate articles can readily be demonstrated by their perusal.

As a reference book for the general practitioner and practitioner of general surgery it recommends itself because of its conciseness and the practical manner in which each topic is treated. The chapters on Military and Naval Surgery are thoroughly up-to-date and written by an exceptionally able author.

NEWS AND NOTES.

The Minneapolis Homœopathic Medical Society meets on the second Wednesday eve of each month; Henry C. Aldrich, M. D., President; Adele S. Hutchison, M. D., Vice-President; O. K. Richardson, M. D., Secretary.

The State Medical Examining Board holds its examinations at the State Capital building in St. Paul, the first Tuesday in January, April, June and October, C. J. Ringnell, M. D., Minneapolis, Secretary. The homœopathic members are Adele S. Hutchison, M. D., Minneapolis; Thos Lowe, M. D., Slayton and A. B. Cole, M. D., Fergus Falls.

The Minnesota Homœopathic Medical Society meets in St. Paul the third Tuesday, Wednesday and Thursday of May 1903. Oscar K. Richardson, Minneapolis, President; Henry C. Aldrich, Minneapolis, Secretary.

Dr. J. Richey Horner, of Cleveland, was recently taking post graduate work in the Illinois School of Electro-Therapeutics in Chicago.

Dr. Mary Elizabeth Hanks is president of the Chicago Homœopathic Medical Society. We had the pleasure of attending the September meeting of the society.

Dr. J. Wyllis Hassler, of Philadelphia, was quite badly scalded on Sept. 7. A locomotive ran into the car in which he was seated and the escaping steam injured him as stated. We are pleased to state he is improving nicely.

Dr. H. W. Halverson, of Garrettsville, S. D., was married on Sept. 25 to Miss Amalia Schneider of Sioux Falls, S. D.

Dr. and Mrs. Thos. Lowe, of Slayton, were recent welcome visitors in the city.

Dr. Addie Gilman Kirkpatrick, of Whatcom, Wash., was recently in the city.

Dr. Sheldon Leavitt has resigned from the faculty of the Chicago Homœopathic Medical College.

Dr. G. W. Lawrence, of Colorado Springs, Colorado, a member of the State Board of Medical Examiners, died not long since.

September 17th last was the occasion of a very happy event in the life of Dr. T. Griswold Comstock, of St. Louis, Mo., at which the physicians of that city presented the venerable and beloved doctor with a loving cup. That the occasion was an enjoyable one goes without saying and will long be remembered by the many in attendance.

Dr. Chas. Wright (Hahn., '02), has located at 2317 State St., Milwaukee, Wis.

"The Panopath" says that the "National Medical University" withdrew from the Intercollegiate Committee of the American Institute of Homœopathy and not the American Institute of Homœopathy failed to recognize the "University" as a college in good standing.

Dr. E. L. Hall, Univ. of Minn., '02, has located at Russell, Minnesota, and reports business flourishing.

Dr. Geo. M. Haywood, formerly of Rochester, N. Y., has located in Minneapolis, with offices at Suite 601 Medical Block, 608 Nicollet Ave. Dr. Haywood has been in eye, ear, nose and throat work exclusively for many years in his former home and comes highly recommended. He is affiliated with many medical societies and is a distinct gain to the profession of the Twin Cities.

The Journal Belge d' Homœopathie has removed from Brussels to Gand, Belgium, the home of its editor, Dr. S. H. Vanden Berghe.

The Bavarian Chambers have resolved to establish a chair of Homœopathy in the University of Wurzburg.

The Cincinnati College of Medicine has closed its doors because the higher standard of entrance requirements cut down the number of students below the limit necessary for its support.

Dr. Scott Parsons, of St. Louis, Mo., announces his intention of confining his practice to surgery and gynecology exclusively.

Dr. Z. Z. Bryant has removed from Sisseton, South Dakota, to Champlin, Minn.

The hospital at Santos S. Paulo, Brazil, has recently added a homœopathic ward.

Dr. A. M. Linn, of Des Moines, Iowa, has been doing post graduate work in the Chicago hospitals.

Prof. Johannes Orth, of the University of Goettingen, a former pupil of Virchow, has been selected as the latter's successor, in the chair of Pathological Anatomy at the University of Berlin.

At Rochester, N. Y., the caring for smallpox patients in tents, was more beneficial than in hospital buildings.

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Congenital Dislocation of the Hip Joint.

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MINNEAPOLIS.

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During my stay in New York this summer it was my privilege to see a large number of cases of congenital dislocation of the hip joint. Since this condition has evoked so much comment from the press of late it may not be amiss for us to consider the disease, its pathology and treatment.

Congenital dislocation of the hip joint occurs the more frequently in females, the percentage running as high as 80 or 85 per cent, as shown by the various large clinics, both in the United States and abroad.

The displacement is almost always posterior when the cases are brought for treatment, the head of the bone resting on the dorsum of the ilium. It may, however, be anterior or directly upward.

The etiology is now always clear. Traumatism can only be responsible for a small portion of the cases. A family tendency may be seen in some instances, as noted by Dr. Royal Whitman, of New York. The majority, however, must be accounted for in some other way and the most reasonable explanation to me is that of defective development of the acetabulum. The entire rim may be lacking or only its dorsal portion. Some authorities claim that there is greater laxity in the capsular ligament of the female and that this explains the greater liability to displacement as compared with males.

The pathology is just what we would expect. The head of the femur having no buttress of bone above to hold it in place, pushes on upward and backward (sometimes forward, or forward and upward), dragging the capsule with it. Resting on the more or less flat outer surface of the ilium, the head of the femur becomes flattened on one side, while the pressure upon the periosteum and interposed capsule causes adhesions and the formation of a partial new acetabulum. The old acetabulum fills up with fibrous and later cartilaginous material,

while the capsule in the interval between the new and old articular cavities contracts, producing an hour glass effect upon the whole capsule. The opening through the neck thus produced is sometimes so small that it is difficult to get the head of the femur through it and into its proper place. The neck of the bone becomes distorted, rotated forward on the shaft and the angle between neck and shaft greatly decreased; often in old cases the head and neck together make only a knuckle of bone, having no semblance of the normal parts. The ligamentum teres is very much attenuated and often escapes notice. The pelvic girdle is tilted forward on one, or both sides, as the case may be, and the lumbar curve in the spine greatly increased to compensate. This tends also to push the sacrum forward. The final effect upon the pelvis is to decrease the antero posterior diameter of the inlet and increase the transverse diameter of the outlet. The muscles about the joint are also shortened and misplaced so that their functional force is very much diminished.

Diagnosis.—This is usually easy, though the condition is seldom noticed until the child begins to walk. In unilateral cases a distinct and peculiar limp grows worse with the age of the child.

There is shortening of the limb, prominence of the trochanter above Nelaton's Line, tilting the pelvis and flattening the buttock. The limb is sometimes adducted, making the shortening more apparent. The gait in these patients has a peculiar swing which simulates somewhat that of a person descending stairs.

In bilateral cases the tilting forward of the pelvis and lordosis of the spine are more marked. The trochanters are prominent and above Nelaton's Line, the thighs widely separated and the abdomen protrudes. The child walks with a peculiar gait, the so-called "Duck Waddle," internal rotation is present, but not marked. Pseudo-hypertrophic paralysis, extreme bow-legs and lumbar Pott's simulate slightly the gait just mentioned, but should be easily excluded, for in these cases the hip joint is normal. A careful digital examination will show that the head of the femur does not retain a fixed relation to the os innominatum, but can be moved slightly up and down. Sometimes the head of the femur may be palpated over the ilium.

Treatment.—In 1829 Dupuytren stated that cure, or even palliation was manifestly impossible. This statement was accepted until 1890, when Hoffa first opened the joint, enlarged the acetabulum sufficiently to contain the head of the femur, stretched the soft parts and applied a fixation dressing. Two general methods have grown out of his work.

First.—The open operation, in which the joint is opened from behind the great trochanter, and,

Second.—The closed or bloodless method, in which the soft parts

are stretched and the head of the bone forcibly replaced and development of the acetabulum hoped for.

For the open operation, when the patient is old enough to bear restraint (five years or more) a preliminary traction treatment in bed by means of weights and pulley is considered advantageous by most authorities. By this means in the course of two or three weeks the soft parts are stretched slowly but thoroughly and without injury until the trochanter is brought down to its normal position; stretching is then completed at the time of the operation under anesthesia. The thigh is flexed on the abdomen, abducted to put the adductors on tension and then the latter strongly massaged over the tense adductors, rubbing from the knee toward pelvis with the side of the hand until the knee can be carried back as far as the dorsal plane of the body.

In younger subjects, the stretching can all be done by manual force at the time of the operation. This is done by passing a folded sheet beneath the perineum and bringing the ends up around the shoulder of the affected side. They may be held there by an assistant or tied to the head of the table. The operator now grasps the thigh just above the knee and exerts strong but interrupted traction in adduction, abduction and rotation, until the trochanter is brought down to its proper place and the limb is of normal length. Considerable time must be taken for this work, or severe injury will be done the soft parts. From ten to twenty minutes will usually suffice. The stretching is then completed by flexion, adduction and massage, as before. Before massaging, the parts must be smeared with sterile vaseline to prevent breaking of the skin.

The soft parts being thoroughly stretched, the joint is entered through an incision, three or four inches long, just behind the great trochanter. If the capsule is still taut, a pair of uterine dilators may be inserted through the opening and the capsule still further divulsed. The acetabulum is now cleaned out and enlarged if necessary.

For his pioneer work in this part of the operation great credit is due the late Dr. A. M. Phelps of New York. He devised an instrument to bore out a cup-shaped cavity if none was there, large enough and of the right shape, to make a sure resting place for the head of the femur.

The dislocation is now reduced in the usual manner, viz: by adduction, flexion, circumduction outward and extension. Then, while the head of the femur is held in place by firm pressure over the great trochanter, the thigh is flexed and extended to the normal limit—this to make sure the soft parts are properly elongated. Then while the thigh is extended the leg is also extended several times to stretch the ham-string muscles. From this point there are two methods of procedure.

First.—Closure of the wound, except at lower end and where an opening is left for drainage, and a fixed dressing applied, extending from below the flexed knee to the lower end of the sternum, with the thigh in moderate flexion and abduction. Dr. Royal Whitman recommends internal rotation, while Prof. Lorenz advises outward rotation. The varied deformities of the head and neck of the femur probably explain these different opinions. To my mind inward rotation is the more scientific position for most cases. However, it is not internal or external rotation that we are after, but that position of the bone which gives greatest assurance against recurrence of deformity. It is not likely that either method is suitable for all cases.

The second method is that of the lamented Dr. Phelps, viz: leaving the wound wide open, packing it with gauze and allowing it to heal by granulation. Dr. Plimpton, of New York, also uses this method. The object is to obtain a large cicatrix over the joint which contracts and holds the bone firmly in position.

The dressing is the same as in the previous method. Fenestrae must, of course, be made in the casts for dressing the wounds. The wound in this second method seems very large to leave wide open, but it heals quite rapidly, and seldom gives any trouble.

In either of these methods the first dressing usually remains in place from six to eight weeks. It is then replaced by one which extends only to the knee, with deformity decreased and the patient is encouraged to walk. At the end of another month or six weeks, when the joint is no longer sensitive to direct pressure or manipulation, the cast is removed and the patient allowed to go about.

Regular massage and exercise should be begun and continued for a year to prevent deformity and obtain as nearly normal function as possible. The after-treatment is just as important as the operation itself.

The so-called "bloodless, or closed operation" was performed first in 1895.

It consists of stretching the soft parts much the same as for the open operation. The thigh is firmly flexed on the abdomen to elongate the soft parts on the under side of the joint then abducted to put the adductors on tension. These muscles are then stretched out by firm massage, with the side of the hand over the inner side of the thigh, from the knee toward the pelvis. This process is kept up until the knee can be carried back as far as the posterior plane of the body. The limb is then extended and the operator grasps the thigh just above the knee and proceeds to elongate as previously described. When the trochanter is brought down to, or a little below its normal position, the thigh is

again flexed on the abdomen abducted and still further elongated by means of massage with a pad placed beneath the affected hip until the knee can be carried back beyond the posterior plane of the body.

The displacement is now reduced in the usual manner. The head of the femur can be felt and usually heard to slip over the rim of the acetabulum into its proper place.

An effort is now made to deepen the acetabulum by pressure, rotating the femur in and out again and again with flexion and extension while the head of the bone is being held firmly in place by pressure over the great trochanter. The leg should also be extended upon the thigh, so as to elongate the hamstring muscles, as in the previous operation.

The dressing is a plaster cast applied as in the previous operations from below the flexed knee to the ensiform cartilage above with the thigh in moderate flexion and abduction to the point of firm retention. The thigh should be rotated in or out according to the position of greatest stability.

This cast remains in place for from six weeks to two or three months, or even longer. It is then replaced by one extending only to the knee with the flexion and abduction of the thigh somewhat reduced. This child is now encouraged to use the limb as much as possible. At the end of another six or eight weeks, the cast is replaced by another of equal length, but with the flexion and abduction of the thigh still further reduced—say one-half. Again at the end of six or eight weeks more, still another is applied in the same way. By this time the limb will have been brought into nearly normal position and in a short time the cast can be dispensed with.

Careful but not meddlesome examination must be made at each change of dressing to see that the head of the femur is in its normal position. The number of casts employed and duration of treatment is governed by the shallowness of the acetabulum and amount of displacement in each particular case.

The casts will give much trouble from pressure and excoriations unless properly applied. The affected limb and lower part of the body should be covered with absorbent cotton to the depth of $\frac{3}{4}$ to 1 inch. A gauze or muslin bandage applied snugly as an ordinary spica holds this in place. The plaster bandages should be five inches wide and the first turns made around the bended knee of affected limb and sound side of the pelvis, after this the turns are made as in the ordinary spica. Bass-wood splints or extra turns should be placed in the region of the groin to insure strength.

While the plaster is hardening it should be trimmed off around

the perineum and all edges made smooth. It adds to the comfort of the patient and neatness of the dressing to draw close fitting stockinette of ample length over the affected limb or limbs and body before applying the cotton. Then after the cast is trimmed, the stockinette can be drawn over the edges from above and below and stitched in place.

Prognosis.—With the closed method about 25 per cent of the cases operated upon are cured, and about an equal number are changed from a posterior to an anterior dislocation, which is a much better condition and may be classed as a half cure. Where the operation is unsuccessful it can be followed by the open method with greater ease than if the latter had been resorted to at first.

Treatment by means of casts must be continued over a long period of time and the people should understand this. A recurrence of the displacement may occur at any time during the treatment, but is most likely after the first or second changing of casts.

Bilateral cases are of course less favorable than unilateral. In the open operation permanency of reduction is quite sure. Here the great danger lay in deformity, viz., flexion and adduction with limited motion. However, if massage and exercise are begun and continued for a year or so, good function may be expected.

Covering the relative merit of the two methods it may be said that in the open operation, the child will be started to walk in from 2½ to 3 months; that there is little danger of recurrence, but that there is danger of limited motion and deformity, unless massage and exercise are begun early and continued for a year. A firm useful joint is the result.

In the closed operation, the treatment by casts is much longer and recurrence is likely in a large percentage of the cases. If the displacement does not occur, it is often simply changed from a posterior to an anterior dislocation.

In favor of the operation it may be said, that it can usually be applied as soon as a diagnosis is made, for being free from danger and not necessitating any cutting or confinement to a hospital, the consent of the parents is readily obtained. This is not true of the open operation. Again, if the closed method should fail, the joint is in better condition for the open operation, than if it had not been touched.

In all cases, treatment should be begun as soon as a diagnosis is made in children under ten and twelve years of age. After twelve years of age, results are not as favorable with either treatment.

All cases should be treated if seen early enough, for the result obtained will be infinitely better than the original condition.

Friends We Frequently Need,

R. DEL MAS, Ph. D., M. D.,

CENTERVILLE, MINN.

Let us walk to the bedside of a patient who has received bruises, and we immediately think of *arnica*. This remedy copes with extravasation of blood under the skin. In case of a black eye, *arnica* may work superficially; and, after the tumefaction is removed, we may have to contend with pains in the head, as if in the bones; then *symphitum* comes into play.

For bleeding of, and injuries to, the gums after extraction of teeth, think of *arnica*. If a woman is greatly excited from having a tooth extracted, give her *sepia*. If the dentine is very sensitive to the drill, remember *antimonium crudum*. In *pyorrhœa alveolaris*, look up *Hepar, Merc.*, and *silicia* especially.

After a severe shock or injury, the patient may through the night, go through terrors of horrors, and opium looks just like it; but, while the fears of opium remain even in the daytime, *arnica* will only dream of it.

After an injury to a joint we may find that the ligaments and tendons are weak; and, the soreness being already gone, we give *Rhus tox*. Sometimes we will have to deal with a joint that has been badly mangled, and where *Rhus* has not done the work we wanted to; then we call on *Calc. carb.* to finish up the work. This is what we call "routine prescribing," for we suppose that the constitutional state does not contraindicate it.

Where the periosteum has been injured, the tendons overstrained, giving rise to sore nodules in the periosteum, lumps, bunches in the tendons, contractions, we need *Ruta*. *Rhus* looks like it a great deal, but for the periosteal bruises and tendinous nodules.

For the dressing of lacerations and cuts we have *calendula*. A few stitches may be necessary; and, if healing does not occur by first intention, the local treatment must give its place to the "constitutional" remedy.

While dealing with strains, I should have mentioned the eye pains and headaches, and inability to concentrate vision in those that have over-exerted their eyes. *Natrum mur.* and *Arg. nit.* are often thought of; but *Ruta* should not be forgotten; and the prescriber ought to bear in mind that *Ruta* is aggravated from cold, and *arg. nit.* from heat. Discrimination in prescribing is a sure way to success. We must remember that we treat "patients" and not "diseases."

A great many of the readers of this article have often prevented tetanus from punctured wounds by putting on the tongue of their patients a dose of *Ledum*. But if tetanic contractions, have already supervened,

hypericum must take the place of *Ledum*, and also when shooting pains travel along the nerve of the limbs. *Hypericum* might be called a "nerve" medicine but only after injuries. Its sphere of action is on the lacerated sentient nerves; it may be crushed finger end, a torn nail, a bruised coccyx; it matters not what you call it. A sore coccyx may develop after parturition, and *Hypericum* will cure it. *Staphysagria* is another powerful remedy for lacerated nerves, and here we find burning, stinging pains in a local spot. The pains do not shoot along the nerves like in *Hypericum*. If after a clean-cut wound made with a sharp instrument (and the instrument may be your operating knife), the patient complains of burning pains, and the wound threatens not to granulate according to your wishes, give *Staphysagria*, and a "little above the tincture." After dilating the sphincters your patient may complain of burning, stinging pains in the parts, and you may then—like an allopath—caress your hypodermic syringe, especially so if your patient is a delicate, nervous woman. Do not think of morphine then, but of *Staphysagria* instead; and she will soon want to sleep—the patient, I mean.

I once heard a prominent man in our ranks say that a son of Hahnemann should never use the hypodermic syringe, for it filled many early graves, and was only used to cover the mistakes and ignorance of barbarism.

After having done a great deal of cutting on the operating table, you may some day find your patient greatly prostrated, cold, oozing blood from the parts, and breathing into your face a cold breath. You will undoubtedly then try to warm the patient with hot bottles; perhaps you will caress again your syringe and instill into that body some brandy, strychnine or camphor. If you know our remedies a little, you will reach your medicine case and give carb. veg.; but it may not work, for carb. veg. is good for the physician and rarely for the surgeon in similar cases. You shall take "stront. carb" and that is your carb. veg., if you are a surgeon.

If your patient was shriveled, his legs blue, cold, his body red and still cold to touch, and wanted to be uncovered, *secale* should be given.

If he were like a cadaver—not red—with skin as cold as ice and no sweat, and wanted no covers on, camphor would be the remedy in whatever form, low or high. But give it.

Can any of us tell whether McKinley would not still be at Washington, had any of our leaders in materia medica been at his bedside before and after the operation? We operate as well as the regular does, and we can cure better. Truth shall some day prevail over conceit and tyranny, and ignorance, too!!

After shocks following injuries we have to consider *Acon.*, *Arn.*, *Camph.*, *Hyper.*, *Lach.*, *Op.*, and *Verat.* in the first degree; and *am-c.*, *carb-veg.*, *cham.*, *cupr.*, *phos.*, and *staph.* in the second degree.

For wounds that bleed freely; Arn., carb. veg., kreos., *Lach.*, and *Phos.*

Those that are slow to heal will require to look up. Calc., cham., graph., lach., nit-ac., petr., *sil.*, and sulph.

For those resulting from splinters: Arn., carb. v. hep., hyper., led., nit, ac., silic, staph.

We sometimes have a woman walking into the office to be treated for a lump that developed in the mammary gland after an injury; at times induration has not yet taken place; but in either instance we think of Conium. Any gland may call for the same remedy if the symptoms agree.

Induration of the lip following the use of a clay pipe generally calls for Conium.

We never think of conium without remembering the patient.

In a low, debilitated constitution caries of the periosteum will often follow an injury, and then Asaf., chin., merc., Phos.-ac., and silica come into view.

Injuries of the tendon often call for anac. stings of insects for apis, carb.-ac., led.; dissecting wounds for ars., carb.-veg., crot.-h., *Lach.*, phos., pyrogen.

Cicatrices of the mammæ often cause us to feel nervous at the approach of a confinement. There we give Graph., and lactation goes on normally. The greatest mistake the obstetrician can make is to lance a mammary abscess, for then he lays the foundation for further trouble. If he knows not better, he is kindly requested to leave the matter to Nature.

We sometimes find newly married women complaining of "ineffectual urging to urinate," and further questioning reveals nothing else. Try staphysagria, and you will know the rest.

Whenever I have a "simple" fracture, I put the patient under calc.; and whether the patient be old or young it does him good,—as to the fracture, I mean; and it does not hurt him otherwise, either.

If it is a case of dislocation, I try to reach the joint first by reduction, and then by Rhus. It seems to work well.

The reader will kindly believe that I have faith in the knife; but I leave it in my "case" as long as my "cases" can do without it.

Shock.

T. E. COSTAIN, M. D.,

CHICAGO, ILL.

In taking up this question of shock, I may not be able to add anything new to either its pathology or to its treatment. It may be, however, that by noting in concise form the results of several observers, and of my own personal observations, and by discussing the subject together, we may be mutually benefitted.

The pathology of shock is still a debatable question. Boise, in an article written in '99 and presented before the American Association of Obstetrics and Gynaecology, has attacked the old theories of paresis of the sympathetic nerve, and explains it on the theory of a hyper-irritation of the sympathetic, resulting in the stimulation of the vaso motors, contraction of the arterioles, and spasmodic action of the heart. The condition of the skin and the pupils, the heart-action, feeble pulse, scanty secretion of urine, can all be easily explained on the theory of sympathetic over-stimulation. The therapeutic measures in vogue seem to meet the indications, thus giving this theory added strength. Amyl nit., nitroglycerine, morphine, and moist heat over the heart, are regarded as sedatives to the sympathetic and relaxants of the arterioles.

The various phenomena observed from the side of the anesthetist is at times mystifying. Persons undergoing laparotomies may be perfectly normal up to the point of amputating a tumor or ovary or appendix, when a sudden change in pulse, skin, etc., occurs, only to have reaction take place just as quickly on pouring a normal salt solution into the abdominal cavity. In one case the reverse was true. The patient exhibited no sign of shock until the abdominal cavity was being washed out preparatory to closing the abdominal wall. Again we may observe the same symptoms of profound shock on the simple introduction of a rectal speculum, while on the other hand, usually its introduction will establish immediate reaction. In other cases it may be observed that a simple operation may produce shock, while a capital operation may be performed without the slightest degree of shock. Whitford says that shock by no means accounts for the collapse that may follow a laparotomy. He regards the loss of fluids, resulting in the failure of the circulation, as the prime factor. If this be true, filling the peritoneum with hot sterile salt solution should correct this at once. Murphy says, "Does shock always mean bleeding? Not always, though it in a great degree depends on blood loss." My own observation so thoroughly agrees with this statement that some years ago I took the ground before this Association that there was no shock without blood loss. He further says, "Shock depends to a great extent on the length of operation and the quantity of anesthetic used. It shows itself while the patient is still on the table, and if not properly combatted, or if not noted by the anesthetist, may become so profound that the patient never rallies. Rarely may we have shock not depending on hemorrhage." These questions now confront us:

1st.—How to prepare our patient so as to avoid shock.

2nd.—How to prevent it during the operation.

3rd.—How to combat it after it has been sustained.

The preparation of the patient must include:

1. Her mental attitude towards the work to be performed. The anesthetist, as well as the surgeon, will here find work to do: the one to teach her to welcome the agent, without which much pain and suffering would be entailed, and to place her mind at rest as to its slight relative dangers; the other to instil a great confidence that the work will be fully and thoroughly performed, and to get her mental attitude fixed on obtaining relief from her present discomforts and sufferings.

2. The length of time the patient should remain in the hospital before the work is undertaken. This will differ largely with the individual. Some gain great confidence by knowing their surroundings and feeling the hospital atmosphere for a few days, while to others the tension of the preparatory work only upsets their nervous composure, and the time had better be limited.

3. The preparation of the alimentary canal. In favorable cases this requires three days, while the feeding should be liberal up to the last meal.

4. The heart and circulation can be aided by using salt brine or friction baths. The bodily waste may be prevented and the tissues be put in better condition by a few days rest in bed.

5. The kidneys should receive attention with the proper medication to increase the elimination of solids. For this purpose adonis vern. or lithia may be used.

The question of how to prevent shock during the operation lies largely with the anesthetist. The choice of anesthetic should be the first consideration, and will depend somewhat on the results of the previous examination of urine, heart, etc. Many cases do not do well under chloroform; others, under ether. When this is noted a change of anesthetic should take place, and such change will invariably be followed with good results. At the first sign of a change in the character of the pulse, or of a cold skin, or of a cold perspiration, stimulants should be given. It is not proper to wait until shock has already supervened, for this is another case of "a stitch in time." The chest of the patient should be protected. The temperature of the room should not be allowed to go below 75 degrees. The urine should be drawn before the patient is placed on the table; but if this was neglected it should now be attended to. A little hot normal salt solution may be thrown into the rectum at this time with good results; and the use of hot sand bags or hot water bottles, placed by the side of the chest, will sustain the bodily heat.

The chief means by which shock can be successfully overcome is undoubtedly intra-venous infusions of a sterile normal salt solution. This has received the unqualified endorsement of many of the leading

surgeons of both schools, but there are a certain few amongst them—notably the Johns Hopkins surgeons—who refuse to endorse this method, relying rather on the inter-cellular method of infusion, advocating chiefly the placing of the fluid under the breast. To discuss the many views on this point would make my paper too long, but I trust it may be fully discussed by those present.

In view of the point made in the beginning of this paper, viz: that shock nearly always depends on blood loss, I ask you to pardon a moment's digression. Mrs. P., age about 45, several years ago underwent operation for vaginal hysterectomy. Before she was removed from the table, profound shock was noticed, and stimulents, such as brandy, whiskey, camphor and ether, and a combination of nitroglycerine, digitalis and strychnia, were given, with only temporary improvement. 1-16 gr. of strychnia was administered every hour for four hours, when the idea occurred to the physician apropos to the foregoing theory, and ten drops of ergot were given hypodermically. In about ten minutes the radial pulse could be felt for the first time, and it gradually gained in strength until the patient had fully recovered from the shock. As one of the means of combatting shock not often thought of, this suggestion may be of service.

Other means of combatting shock, such as normal salt solution per rectum, about a teacupful every hour, will often steady the heart; a few drops of camphor, or varat, vir., on the tongue, may be employed; increasing the bodily heat by means of hot water bottles, etc. And to these may be added morphia, a small dose at this time being more efficacious than a larger one.

In closing let us add that ordinary stimulents should begin early, that all bleeding should be stopped before resorting to direct infusion, and that immediately after this measure the patient should be kept as quiet and comfortable as possible in order to give nature a proper chance for reaction.

Race Division and its Influence Upon the Derivation of Temperament.

A. E. COMSTOCK, A. B., M. D.,

ST. PAUL, MINN.

A syllabus of the lecture given at the convocation held Oct. 28th 1902, of the students and faculty of the College of Homœopathic Medicine and Surgery of the University of Minnesota.

A subject in which I wish to show the resemblance between pure early racial types with their characteristics and the people we meet to-day with their individual peculiarities of physical organization, manners of acting, feeling and thinking which is generally understood to be included in the term temperament.

This makes the study of Anthropology and Ethnology necessary to a certain extent. Anthropology is the science of man, physical, mental and historical,—an investigation of the laws of his origin and progress and his relation to inferior forms of life.

Ethnology is that department of science which investigates the customs prevailing among different races and at different stages of culture.

In tracing relationship of race to race we have three sources of information:

1. Language.
2. Physical characteristics.
3. Written memorials of every sort.

We depend mostly on 2 because most scientific and accurate.

Authors differ in classification of races, viz:

Picard, 7.

Cuvier, 3.

Blumenbach, 5.

Huxley, 4.

Pickering, 11.

Be that as it may the early origin of man depends upon two primary theories:

1. Monogenistic.
2. Pologenistic.

Zoologists favor the monogenist doctrine which traces mankind to a single pair rather than the pologenist which assumes different centers of origin.

We will assume the monogenistic doctrine as it presents strongest evidence in our mind principally for two reasons:

1. All tribes, black to white, from most savage to most cultured, have general likeness in bodily structure, and in the working of their minds as is best accounted for in a common ancestry.

2. That all races, notwithstanding their form and color are capable of intermarriage and forming cross races of every combination such as the millions of mulattoes and mestizoes of the New World from a mixture of Europeans, Africans and Native Americans with no lessening in fertility. This points again to common ancestry. This doctrine agrees best with ordinary experience and scientific research.

But as the history of man's development and the division of races becomes known we find the evidences of language through marked affinities, grouped together in several great families.

These have a marked influence in determining relationship and will agree with either doctrine heretofore mentioned.

Max Müller and Prof. W. D. Whitney agree, that through individ-

ual influences or by wear and tear of speech, the different system of grammar and varieties of speech may have been produced.

1. Evidences of language.

The divisions we assume, then, are:

1. Aryian or
Indo-European.
(Dolichocephalic.)

Eastern division—

Oldest branch is the Sanskrit, in which the books of the Hindus and Vedas were written.

With the Sanskrit belong:

Turanian or Persian.

Western division—

Greek.

Latin.

Celtic or Gauls.

Germanic

or

Teutonic.

Slavonic or Slavo-Lettic.

2. Semitic.

Embraces communities described in Genesis as the descendants of Shem and, are:

Assyrian.

Babylonian.

Hebrew.

Phœnician.

Syrian or Aramiac.

Arabic.

3. Turanean.
(Brachycephalic)
Alpine.

An extensive family.

Finnno-Hungarian.

Samoyed—from North Sea to boundary between Russia and China.

Turkish or Tartar,

Probably the Mongolian and Tungusic.

Others.
Unable to agree on
classification.

Chinese and Japs.

Malay—Polynesian.

Hametic or Egyptian as principal member.

South Indian.

African.

American Indian.

The Semitic, Turanean, and others, as Chinese, Japs, African, Indians, etc., have their individual uniformity and make-up. They are all strong stocks and typically pure racial people, with

Physical characteristics same as ancestral families.

All interesting to study.

All must be studied in Ethnology and Anthropology, but for our use here we will confine our interest to the great Western division of the Aryan family, which I have already enumerated, and one branch of the Turanean. (Under Alpine.)

The Aryan family, as it concerns us, comprises sub-strata of our population; consequently the importance accorded to it. But by the second source of information (Physical characteristics) we find in Europe three distinctive families.

The three families of Europe. According to physical characteristics. Teutonic, Alpine, Mediterranean.

1. HEAD FORMS (by cephalic index)—Measured on decimal scale of 100 and expressed in percentage—

Above 80% = Brachycephalic = broad, round face.

Below 75% = Dolichocephalic = long, oval face.

Between 75% and 80% = Mesocephalic.

Its relation to the location of the people is, viz.:

Teutonic—75-81%.

Alpine—81-87%.

Mediterranean—75-79%.

2. IMPIGMENTATION. Least understood department of physical anthropology.

Were once perhaps pure types.

Now in Europe, less than 50% pure types. The rest mixed.

Teutonic of northern limit are 30% blonde, 1-10 brunette, remainder mixed, with tendency to bloneness.

Mediterranean, 50% brunette type.

Pure blondes absent, 50% mixed.

Intermixture has reduced pure types with tendency to brunetness. Due to some factor of environment working through physiological processes. Slowly acquired and persistent.

Alpine type—Turanean—An intermediate type—

Brownish hair—hazel eyes—pure type rare.

Mountainous parts, tendency to bloneness caused by more fixed racial purity, unfavorable economic environments, altitude, exposure, unsanitary dwellings, etc.

3. STATURE—

Teutonic—5 ft. 9 in. to 7 ft.

Alpine—4 ft. 6 in. to 5 ft. 7 in.

Mediterranean—4 ft. 6 in. to 5 ft. 1 in.

Summary of three European racial types with mental traits:

I. TEUTONIC.

Head.	Face.	Hair.	Eyes.	Stature.	Nose.
Long.	Long or oval.	Light.	Blue.	Tall.	Narrow or aquiline.

MENTAL—Cold, reserved. Grievances are nursed a long time.

Revenge smoulders a long time, but they are persistent. Tempers are terrific when aroused.

Tendency to self-destruction, but other crime is more against the state.

Embezzlement, burglary and arson.

Crime is settled by the judge.

II. ALPINE.

Are the people referred to as being a branch of the Turaneans.

Head.	Face.	Hair.	Eyes.	Stature.	Nose.
Round.	Broad	Chestnut.	Hazel	Medium	Variable
	or		or	or	Rather
	Stocky		Gray	Stocky	Broad.

MENTAL—Family relations more secretly guarded. They are inconsistent, fickle, quick tempered, passionate and quickly pacified.

Crime is more often an offence to the person. Assault, murder, rape, etc.

Settlement of crime taken in their own hands.

III. MEDITERRANEAN.

Head.	Face.	Hair.	Eyes.	Stature.	Nose.
Long.	Long	Dark	Black	Medium	Rather
	or	Brown		or	Broad
	Oval.	or Black.		Slender.	

MENTAL—Great variety of conditions. Family relations more often violated. Highest and lowest.

Crime varies in intensity and kind; greater tendency toward homicide, assault, prostitution, juvenile delinquency and the spawn of ignorance.

Have given pure European racial types.

The three great families physically considered.

The various nations are merely so many subdivisions.

They are our ancestors.

The mixture and amalgamations that have taken place have produced our present conditions.

Now we will show similarity of pure racial types and our individual having a pure temperament.

Temperament is defined as that individual peculiarity of physical organization by which the manner of acting, feeling and thinking of each person is permanently affected.

Medically, it is the functional characteristic of the living organism and the way it defends itself against disease.

Originally only physical distinctions were considered, later certain mental qualities and traits of character have been added.

"The study of the temperament could have no practical value, could lead to no teaching apart from medicine, but for the recognition of a physical part and a mental part of every temperament." So we associate the mind with the body to constitute the doctrine of the temperaments.

Temperaments of clear type are sanguine, bilious, lymphatic and nervous. Difficult to give absolute description.

I. SANGUINE. (Celts and Alpine.)

Physical Characteristics—

COLOR.

Hair—red to reddish brown, abundant.

Eyes—blue and bright.

Complexion—more or less florid—ruddy.

FORM.

Face—square. Skin—moist and warm.

Nose—outspread.

Neck—short.

Build—thick set.

Fine muscular development—rounded limbs.

Slight perspiration.

Full, strong pulse; plethoric.

MENTAL—

1. Impulsive, warm, buoyant and cheerful, favorable conclusions thoughtlessly drawn.

2. Excitable, readily provoked, easily reconciled, emotional.

3. Ardent in every thing, not persistent. Good lovers (while it lasts).

4. Not enduring in work.

5. Muscular pursuits preferred to intellectual.

6. Equally happy in pursuit of little as of great ends.

7. Firm, outspoken, speech.

8. Intellectual and witty, but lack depth; do not easily rise to genius.

9. Men of action; must have something hard to do. Confident.

10. Morbid aptitude is toward inflammation and hemorrhage. Fa-brile tendencies.

11. Good living and good cheer bring its results.

II. Bilious or choleric. (Mediterranean).

COLOR.

Hair—black, abundant.

Eyes—black or brown, not usually bright.

Complexion—dark.

Color of face—pale olive, and sallow skin, dry.

FORM.

Face—square.

Nose—outspread.

Neck—short.

Build—medium.

Angular form, but strong.

MENTAL—

1. Not impulsive, serious; conclusions thoughtfully aimed at.

2. Passionate, jealous, revengeful, unscrupulous. In business matters, cool and wary.

3. Eager, earnest and persistent.

4. Enduring in work.

5. Business or gainful pursuits preferred to muscular or intellectual, but able to excel in all. Deep devotion. Self emulation.

6. Happy in the pursuit and attainment of wealth, power and family welfare. Ambitious; want the earth.

7. Decided speech; always ready and informed, but dry wits and jokes. Strong likes and dislikes; curse humanity in general. Morbid tendency.

Diseases of liver, internal organs, and finally brain.

“In the bilious bile juices the golden light puts on

In the lymphatic floods of chyle in silver currents run.”

III. Lymphatic—Phlegmatic. (Teutonic.)

The cold, indifferent, dull temperament.

COLOR.

Hair—fair brown, sandy white, thin.

Eyes—blue, brown, grey, green or hazel; white part is often in too great proportion, lusterless, dim eyed, dull.

Complexion—colorless, dense, pallid.

FORM.

Face—square.

Nose—outspread.

Neck—short.

Build—thick-set.

Small blood vessels, much perspiration. Feeble
and slow pulse; want of energy in physical
and animal functions.

MENTAL—

1. Not impulsive—slow, heavy; conclusions thoughtfully aimed at.
2. Not excitable, not readily provoked, forgives but never forgets.
3. Persistent, not ardent.
4. Enduring in work—a plodder.
5. Muscular pursuits avoided.
6. Happy from personal comforts and indulgence.
7. Slow manner of speech—always informed.
8. Slow to anger, but can be brought to white heat terrific.
9. Not easily made the plaything of his passions.
10. Large bone—abundant circulation, good judgment—cool mind
—great legislators, judges and diplomats.

DISEASES—scrofula—glandular. Vascular. The weak temp.

IV. NERVOUS—CEREBRAL.

Melancholic or atrabilious given place to Cerebral.

COLOR.

Hair—light brown—abundant.

Eyes—grey—brilliant.

Complexion—pale and clear.

FORM.

Face—tapers to narrow chin from broad, high
forehead.

Nose—narrow, straight or aquiline.

Neck—long.

Build—slight, slim, never corpulent.

Often tall and extremely thin.

Muscles—small.

MENTAL—

1. Impulsive, animated, rapid. Conclusions so hastily drawn that
they are often regretted.
2. Excitable, readily provoked; reconciled soon. Imaginative,
sensitive. Particular, fastidious.
3. Irresolute, persistent after final decision.
4. Enduring in work—never give in. In danger of physical bank-
ruptcy.

5. Intellectual and muscular pursuits enjoyed.
6. Happiness from whatever pleases the senses and enriches the mind. Travel, art, literature.
7. Speech rapid. Frequently undecided. Precision gives place to fancy.

VARIETIES.

1. Intellectual=peaceful.

2. Ganglionic=restless.

Intellectual

1. or

Peaceful—abstract thinkers.

Ganglionic

2. or

Restless pass from brilliancy to despondency. Melancholia.

After the beautiful; seek the tangent instead of the center. They are the originization of genius and refinement—poets, painters, musicians, literary men, orators. Possess intellect of man, with sensitiveness of woman.

MORBID TENDENCY—Are easily thrown into spasms and delirium. Nervous diseases.

Those given are pure types. Compound temperaments innumerable. A few of the principle ones are: Nervo-sanguine—leaders of humanity. Nervo bilious—men of great depth of thought and feeling. Lymphatic and sang.—quite best types—happy mixture. If equal amount of four, would be perfect.

All can be classified.

From comparisons drawn, you can see similarity of race and temperament.

Benefits and necessity of studying the temperaments.

Aid in diagnosis.

Known for two thousand years, but a comparatively forgotten subject.

Surprising it has been neglected.

Desire for more research in this line.

Authors consulted:

Universal History—Fisher.

Races of Europe—Ripley.

Aryan Race—Morris.

Races and People—Bruiton.

Our Temperaments—Alex. Stewart.

The Phenomenon of the Country Grave Yard.

JOSEPH H. DRAKE, M. D.,

DES MOINES, IOWA.

The avowed purpose of this short paper is to bring to your attention the revolting submission of mankind, in many localities, to the criminal neglect of the cause from which they are suffering, by many careless or don't-care physicians.

It is not necessary for me to mention or explain the fact to a careful, conservative Orificial Surgeon, that ninety per cent of the chronic suffering, especially among females, is due to careless diagnosis in the acute or early stage of the disease or condition from which they are suffering.

In the way of an explanation, I will say that for several months past I have been traveling and changing from one resort to another, from the west to the east (to rest an overworked mind and body) and my attention was forcibly called to the rapidly filling grave yards through parts of the United States and Canada, where I had traveled many times before, and naturally being more or less in company with physicians, I was constrained to investigate the cause of the phenomenal growth of the Cities of the Dead and I found it to be an actual fact, that a large majority of the residents of these Cities of the Dead, were middle aged mothers, whose death was the direct result of careless or neglected diagnosis.

We cannot think of the death only, but must think of the long months and perhaps years of suffering, and the children bereft of their best friend and protector, at a time when they need a mother's love and guidance.

I am persuaded by these thoughts to mention only two out of many cases that came under my observation, while visiting at the resorts of southwestern Canada, during the last two months. Mrs. W—— forty-six years old, very thin in flesh, nervous beyond endurance, constant pain in back and top of head, appetite poor, in fact all the symptoms usually found in an aggravated case of this kind. Mother of four children, youngest ten years old. Has been under a physician's care constantly for eight years, without relief; in fact constantly growing more feeble. At her request I was invited to call and see her, by her physician, who said that he had given her nervines but without relief, and could not see why her condition was so obstinate, but in all these years he had not even suggested an examination to ascertain the cause.

Of course he had never studied reflexes, or cause and effect. After

getting the history of the case from her, I suggested an examination of her body, which was willingly submitted to, in the presence of her husband and physician. I found first, papillæ, warty growths, piles and redundancy of the rectum; second, the womb was very much enlarged, and retroflexed, and old laceration of the cervix had been extreme, but cicatrix and induration had filled it up considerable. Cervix eroded and filled with cysts and pus cavities, the metrium and endo-metrium heavily studded with mucus polypi. I explained to the trio, the abnormal conditions plainly, and advised immediate operation, and insured rapid recovery.

The patient at once insisted that the attending physician invite me to operate, which I did on August 9, 1902, after three days' careful preparation; assisted by the attending physician and others.

I removed in the usual manner all offending causes, and I assure you that before the first two weeks had passed, all were delighted with the change in her condition, toward full recovery, and without detailing symptoms and conditions will mention another lady whose mind was fast failing from similar causes. I operated on her for the same physician, in the same locality, August 11, with most gratifying results, and satisfaction to all concerned. Her reflexes being caused by similar conditions to the case first mentioned. These are only hints on the physical wrecks of married women from neglect.

We also have the maiden by the score, and the school girl in great numbers, whose physical defects need especial attention, that they may attain majoration in a normal condition.

I beseech you, Ladies and Gentlemen, co-workers in this beneficent cause, do not think I am scolding or fault finding, not so. I am calling attention to the fact that these country grave yards, Villages of the Dead, are out-growing the Villages of the Living, and the average middle aged man who has been compelled to erect monuments to the two or three or four young but noble wives, less than middle age, who died during the prolific stage of life. With these words carved in plain letters, Jane and Ann and Mary and Susan, all the beloved wives of John Doe, died of supposed consumption but evidently the result of diagnostic mistakes.

Such an epitaph might set some crank to whirling, so that these victims of circumstances who are planted in the country grave yards, would not be forgotten, like the slothful farmer forgets his corn that is planted, and lets the vile weeds and brush grow and obliterate even the semblance of the intent of the planting.

I again beg of you, sisters and brothers in Science, do not sit idle and let these grave yards populate so rapidly. Be up and doing, cast away jealousy, learn what you can from your brother and impart all knowledge in your possession to save the unfortunate and middle aged from an early grave.

Pardon me, but do not designate this mixed paper a tirade, but accept it in its intent.

**The Public Lectures by the Faculty of the College of Homœopathic
Medicine and Surgery, of the University of Minnesota.**

W. H. LEONARD, M. D.

MINNEAPOLIS, MINN.

The first of this course by Prof. Comstock, "Race division and its influence upon the derivation of temperaments," was a good one, showing much thought and a large use of "midnight oil." The lecture deserved a larger audience.

A knowledge of the temperaments is of much importance to the prescriber both in acute and chronic diseases. That phase of the subject considered in the lecture was exhaustively treated and was of great interest to those who heard it. The classification was the modern one, viz: sanguine, bilious, lymphatic and nervous. The lymphatic is present from a deficiency of the sanguine. Is not this fact a suggestion of a law which has not been discussed in medicine?—the law of modification. This law may find a place in the consideration of temperament. The classification should accord with the organism. Some years ago a writer not a medical man made the following order, viz: Bilious, sanguine, nervous and vrillic. This last originated with Byron from his use of the word "Vril." This accords with the functions of the organism. The first digestive apparatus ruled largely by the liver, hence the term Bilious, but through the same organism comes the lymphatic modified by another organism—the circulator. The second the vascular system gives the sanguine. The third, the nervous system, is a complete organism in itself hence the nervous temperament. Now the vrillic or fourth one has its organism—the whole man.

The vital force and mental sphere has not been represented in the temperaments. This is the name and sphere for the fourth temperament. It controls the three first or is controlled by them. These observations are made because of the importance of the temperaments being based upon the functions of the different organs of the body, for man is a composite being, and is influenced by his environments under the law of modification. Here the physician may find a large field for study.

MINNEAPOLIS HOMŒOPATHIC MAGAZINE.

EDITORS.

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D. W. HORNING, M. D., MINNEAPOLIS. THOS. J. GRAY, M. D., MINNEAPOLIS

The editors are responsible for the maintenance of the dignity and courtesy of the journal, but NOT for the opinions expressed by contributors. Requests for reprints should accompany manuscript. No discourteous or anonymous communications will be recognized.

All manuscripts, exchanges or books for review, should be addressed to HENRY C. ALDRICH, M. D., 313 Medical Block, Minneapolis.

All subscriptions and communications in reference to advertising etc., should be addressed to MAGAZINE PUBLISHING CO., Medical Block, Minneapolis, Minn.

EDITORIAL.

A Model Medical Merger.

There is in existence at Hastings, Minn., a condition of affairs calculated to cause many physicians to stare in amazement. Hastings is a city of some three thousand people and harbors within its limits five physicians—four “old-timers” and one who has settled there within the past few months. In such towns there are bickerings and jealousies, petty quarrels and rivalries between the medical brethren, all of which are of no profit to those involved, or to those who stand aside and witness. So common has this been the condition existing in small cities, towns and villages that the inhabitants get suspicious if there is no quarreling. And today some of Hastings’ people are suspicious.

Some weeks ago one of the Hastings M. D.’s studied the local situation over and noted the following facts regarding the four “old-timers”:

1. They were of about the same age.
2. They were doing about the same amount of business.
3. They had all been in practice about the same length of time.
4. They were all graduates of reputable medical colleges and licensed practitioners.
5. They were all of good moral, social and business repute in the community.

It was evident that these four physicians were on an equal footing in the city, and the idea was at once promulgated of merging the business

of the four into one common institution; of establishing a community of interests to supplant the existing antagonism. Several informal meetings were held; the matter was thoroughly discussed pro and con, and as a result the merger became an established fact, with the following result:

1. The business is centralized in one building. The second floor, eight rooms, of a prominent business block, was leased, remodeled, decorated and equipped for the purpose. Each doctor has his separate consultation room, his own hours and sees his own patients as of old. Should one of them be absent, his cases are attended to by one of the other physicians—just as would have happened before the merger, and the absent physician gets the fee—just as would not have happened before the merger. Patients understand this and are not so apt to suffer from delay in waiting the return of “their doctor.”

2. The merger has increased the equipment of the physicians four fold. Whereas in olden times four copies of one book were necessary to supply four separate physicians, one copy now supplies the four mergers and the money so saved is expended in purchasing additional books which previously none of the mergers felt individually able to afford. The same is true of instruments and appliances. Today, instead of the scanty office outfit of last summer, they have a complete electrical outfit, X-Ray machines, Betz hot air apparatus for knee, limbs and body, and fully equipped laboratories and operating rooms.

3. It is now possible for each member to indulge in post graduate study. In fact it is made compulsory upon each physician to take a six weeks' course in post-graduate work every year. During his absence his business is attended to by the three remaining at home and he gets his income just as though he were at home. The expenses of the post-graduate work are paid out of the common funds of the merger. The specialties are divided so as not to conflict.

4. A decided help to each individual in the merger in his every day work without putting patients to unusual expenses for consultations or exposing the physician to the insinuations of ignorance and incompetence,

Besides these palpable advantages there are many others in a business and professional way which are of undoubted benefit to the physicians, their patients and the community at large. In fact so commendable does the idea seem that to those situated similarly to our Hastings brethren we say: “Go thou and do likewise.”

The Medical Century.

The Medical Century offers a cash prize of \$100 for the best essay on the subject “Why Students of Medicine Should Select the Homeo-

pathic School," competition to be closed March 1st, 1903. Write Dr. W. A. Dewey, 9 E 42d St., New York, for particulars.

Allopathic Liberality?

At Toledo, Ohio, the homeopathic hospital some years since in a spirit of broad liberality established an allopathic staff for the benefit of the allopathic college there; in 1893 a training school for nurses was established with a graduate of an old school hospital at its head. Recently a new superintendent of nurses was appointed, a Miss Kent, a graduate of a homeopathic training school, who was perfectly competent, but owing to her homeopathic affiliation and belief she was persona non grata to the allopaths, who resigned in a body because she was not removed. Thus tending to illustrate the truth of the oft proclaimed statement that the old school are "more tolerant," more "liberal," and growing more so because of the action of the homeopathic leaven with which they have come in contact, and, too, showing how nearly the two schools are coming together.

Illinois Board of Health.

The asininity of a Martinet was never more fully or completely demonstrated than when, in Chicago, recently, the noted Dr. Adolf Lorenz, of Vienna, who, in addition to operating on little Miss Armour for a congenital dislocation of the hip, held a number of clinics before the medical profession of the country assembled, was ordered to appear before the State Board of Health and be examined as to his qualifications and ability to practice. Truly the doings of some who are dressed with brief authority are marvelous.

B O O K S .

DISEASES OF THE EYE—A hand-book of Ophthalmic Practice, for Students and Practitioners. B. G. E. deSchweinitz, A. M. M. D., Professor of Ophtalmology in the Jefferson Medical College; Professor of Diseases of the Eye in the Philadelphia Polyclinic; Ophthalmic Surgeon to the Philadelphia Hospital; Ophthalmologist to the Orthopaedic Hospital and Infirmary for Nervous Diseases. With 255 illustrations, two chromo-lithographic plates; 669 pp.; third edition, thoroughly revised. W. B. Saunders & Co., Philadelphia.

Although ophthalmic practice has for years been looked upon as a "specialty" which the general practitioner should keep his hands off of the fact remains that every physician is compelled to do more or less of this work and is certainly expected to know enough about eye dis-

cases to recognize serious troubles demanding expert attention. Many persons have lost their eyesight simply because their family doctor was not posted on diseases of the eye. To the general practitioner Dr. de Schweinitz's book will be of immense value as in it he devotes much space to the careful elucidation of those points usually least understood. The author's style is clear and understandable, the typographical work is excellent and enough illustrations are used to materially aid in conveying ideas to the reader. This work is worthy of a place in your revolving book case.

A TEXT-BOOK OF MATERIA MEDICA, THERAPEUTICS AND PHARMACOLOGY.—By George Frank Butler, Ph. G., M. D., Professor of Materia Medica and Clinical Medicine in the College of Physicians and Surgeons, Medical Department of the University of Illinois; Professor of General Medicine and Diseases of the Digestive System, Chicago Clinical School; Attending Physician to Cook County Hospital, etc. Third edition, thoroughly revised. Pages 894, illustrated. Cloth, \$4.00, net. Philadelphia, W. B. Saunders & Co.

In this volume Dr. Butler has given the profession a most complete and handy reference book. Besides the U. S. P. drugs and preparations many unofficial and unrecognized remedies are described. To the physician who wants to keep up to date, who takes the trouble to look up every remedy he does not familiarly know and who wants to read current medical literature understandingly, this book will be of great value. The author has winnowed out the chaff, sifted out the inert drug matter and given his readers the really valuable part of the materia medica. The therapeutic applications of the remedies are "old school," but it won't hurt the homeopaths of this land to learn something of how our friends of the other school use their remedies.

THE GENERAL PRACTITIONER AS A SPECIALIST.—By J. D. Albright, M. D., 900 N. 48th St., Philadelphia. 2nd Edition, Revised, Enlarged and Illustrated. Published by the author, 1901.

The author has prepared in this very readable volume the data as to the treatment of the alcohol and opium habits giving full directions as to methods, formulae, etc. The injection treatment of hernia and formulae for the same. The various methods for treating hemorrhoids and other rectal affections with the various formulae.

The various formulae and directions for their use in the treatment of cancer other than surgical.

The treatment of goitre, varicocele, hydrocele, etc., etc.

This volume is a distinct aid to the general practitioner and one

that all should possess. The author gives due credit to many confreres in the preparation of the book among them being our Ralph St. John Perry.

A DICTIONARY OF PRACTICAL HOMEOPATHIC MATERIA MEDICA.—By John Henry Clarke, M. D. In two Volumes. Volume One. London. The Homeopathic Publishing Co., 12 Warwick Lane, Paternoster Row, E. C. 1900. Price, \$17.50 in half morocco; \$15.00 in buckram.

This volume of nearly one thousand pages covers the remedies from *abies nigra* to *hypericum*.

The name of the work "Dictionary" is something of a misnomer as the work does more than define and explain the remedies and their uses; it gives an exhaustive list of the symptoms recorded by the provers of each drug and to all clinical symptoms as well. The symptoms are given under the twenty-seven headings of a schema ranging through the various parts of the body as the Mind, Head, Eyes, Ears, etc., to the Upper Limbs, Lower Limbs, Generalities, Skin, Sleep and Fever.

Our author has endeavored to so present the picture of each remedy that it may be easily recognized and readily distinguished from any and all others.

In preparing the "Dictionary" the author has consulted the works of Allen and Hering, the Cyclopedia of Drug Pathogenesis, Curies' Edition of Jahr's Materia Medica, the Materia Medica of Lippe and Guernsey, Cowperthwaite and many others, and also the writings of many authorities on this subject culled from current and older medical periodical literature, from the pens of such bright and shining stars of the homeopathic firmament as Compton Burnett, Robert T. Cooper, Thomas Skinner, Teste, H. C. Allen, Nash, Oscar Hansen, Dudgeon and others.

Where other than alcoholic preparations of the drug are used that fact is noted as many think that acetic acid is a better solvent of the alkaloids than is alcohol.

The relationship of remedies is dwelt upon, showing the various remedies complementary to each other.

Dr. Clarke has, as he says, kept his attention steadily on the plane of phenomena, and disregarded all the hypothetical and everchanging explanations of pathology and physiology, and has endeavored to portray every feature of drug activity that is likely to find its correspondence in the manifestations of disease. Inasmuch as homeopathy uses phenomena as guides to reach the unseen activities operating below the surface.

And he truly says that "Materia Medica is the *raison d'être* of the

homeopathist, that in it he must live and move and have his being, and consequently he should at least give as much mind to its cultivation as he does to any branch of the healing art or to billiards or golf. Buy the book. Study it. Use it.

"Just get the Delineator."

The Review of Reviews is sustaining its reputation of being the best of the reviews and is more than worth its price for its condensed excerpts of all that is good in the great field of current literature.

In the Atlantic Monthly for November appears a lengthy article on "The Care of the Eyes" by our good friend A. B. Norton, M. D., of New York City, and is an article that not only should be read by all members of the profession but we should each and all call the attention of our patrons to its merits.

ESSENTIALS IN PHARMACEUTICS.—By L. H. Witte, Cleveland, Ohio. 1902.

This booklet contains a series of lectures delivered by the author before the students of the Cleveland Homeopathic Medical College, and is valuable for the instruction given and incidentally for the hints given as to the value of cultivating ones powers of observation.

A LECTURE ON HOMEOPATHY. By John Henry Clarke, M. D. Homeopathic Publishing Co., 12 Warwick Lane, E. C. London, England. 1902. Price one shilling.

This little volume is a well written essay on homeopathy which the author delivered before the nurses and sisters of the London Homeopathic Hospital and is certainly well worth reading.

INTERNATIONAL HOMEOPATHIC MEDICAL DIRECTORY.

1902. New Series., Eighth year of publication. London: Homeopathic Publishing Co., 12 Warwick Lane, Paternoster Row, E. C.

This volume contains a complete list of the homeopathic practitioner in England and its colonies, and in fact of all the European countries; also China, Mexico, Central and South America. It is valuable for all who have patrons that are abroad who may desire homeopathic attention.

Send a postal to the publishers and secure notice of the next issue and have your name and address inserted and receive the book for the small sum of one dollar.

PHYSICIANS VISITING LIST FOR 1903.—52d year of publication. Philadelphia; P. Blakeston's Son & Co., 1012 Walnut St. Price, \$1.00.

This old reliable visiting list is one of the best, and contains this year in addition to other features pages on Incompatibility Chemic Pharmaceutic and Therapeutic and also on the Immediate Treatment of Poisoning. To those who desire a visiting list we can recommend this one.

NEWS AND NOTES.

The Minneapolis Homœopathic Medical Society meets on the second Wednesday eve of each month; Henry C. Aldrich, M. D., President; Adele S. Hutchinson, M. D., Vice-President; O. K. Richardson, M. D., Secretary.

The State Medical Examining Board holds its examinations at the State Capital building in St. Paul, the first Tuesday in January, April, June and October, C. J. Ringnell, M. D., Minneapolis, Secretary. The homœopathic members are Adele S. Hutchinson, M. D., Minneapolis; Thos Lowe, M. D., Slayton and A. B. Cole, M. D., Fergus Falls.

The Minnesota Homœopathic Medical Society meets in St. Paul the third Tuesday, Wednesday and Thursday of May 1908. Oscar K. Richardson, Minneapolis, President Henry C. Aldrich, Minneapolis, Secretary.

PRACTICE FOR SALE. In a R. R. town of 2,000, near San Francisco, Cal. Health resort. Elevated. Beautiful. Practice \$2,500. No other homœopath. Address B. this office.

Dr. W. O. Forbes, of Chicago, has opened an office for the winter in Hot Springs, Arkansas.

New buildings, shortly to be occupied by the Gowanda State Hospital for the Insane of New York, will increase the number of beds from 260 to 710.

The Colorado State Homeopathic Society elected C. W. Judkins, of Glenwood Springs, president; D. A. Strickler, of Denver, vice president; E. J. Clark, of Denver, secretary. The president and vice president were classmates of Ye Editor and F. C. Bowman, of Duluth, and J. E. Couper, of Blue Earth City, graduating from Hahnemann of Philadelphia, 1881.

Dr. R. J. Cummer has been appointed a lecturer on diseases of children, in the Cleveland Homeopathic College.

Dr. A. M. Duffield will return to Huntsville, Alabama, and resume practice.

Dr. D. M. Nottingham, of Lansing, Michigan, has been elected to the State Legislature.

Dr. Bushrod James, of Philadelphia, has recovered from a severe attack of pneumonia we are pleased to note.

Dr. Geo. E. Ricker will be the next City Physician and Superintendent of the City Hospital in Minneapolis, an honor to the position and to Mayor-elect J. C. Haynes, who could have selected no more honorable man for the position.

Dr. E. H. Smith, of Bemidji, Minn., was recently in the Twin Cities.

Dr. W. W. Verner, Hahnemann, Philadelphia, 'or, was surgeon to the Baldwin-Ziegler expedition in search of the North Pole.

It is reported that Dr. Chas. Gathchell is now a member of the faculty of Hahnemann College of Chicago.

A little daughter recently arrived at and is making glad the home of Drs. Myron W. and Grace Gardiner Smith, of Red Wing, Minn.

Dr. Robert Newton Tooker, one of the prominent physicians of Chicago and president of the Illinois Homeopathic Medical association, died suddenly Nov. 9 of apoplexy. When a servant found his body lying on the floor in the bathroom the physician had apparently been dead for several hours. Dr. Tooker, who was 61 years of age, was widely known as a writer on medical subjects. Dr. A. W. Woodward, a member of the same College faculty and professor of materia medica, died on the same day.

Dr. F. R. Mosse is coroner of Olmsted county of which Rochester, his home city, is the county seat.

The course of lectures given by members of the faculty of the College of Homeopathic Medicine and Surgery, was opened auspiciously on Oct. 28th by Dr. A. E. Comstock, of St. Paul, who delivered an able address which appears elsewhere.

Dr. F. M. Gibson delivered a very fine lecture on Glaucoma illustrated by stereopticon views on November 12th, and on Nov. 25th Dr. E. L. Mann delivered an able address on Dr. Eugene H. Porter's noted definition of a homeopathic physician. This latter address we hope to have the pleasure of presenting to our readers in the near future.

Mr. G. A. Babendrier, of the Minneapolis Pharmacy, in his peregrinations, has taken time to tell us that Dr. C. C. Leck, of Austin, contemplates leaving the state of single blessedness and will be married January first, one thousand nine hundred and three.

Dr. W. A. Allen, Rochester, Minn., has recovered from a severe illness from septic poisoning.

A New Jersey woman of 65 is reported to have borne a child recently.

Dr. Stewart, the homeopathic superintendent of Bellevue and other public hospitals of New York City, has resigned and been succeeded by an allopath.

The supreme court of Indiana has sustained the Medical Practice Law of 1901, defining what constitutes the practice of medicine.

Dr. D. M. Goodwin, of Los Angeles, California, formerly of Minneapolis, has retired from practice and has gone into the lumber business at 305 E. 5th St., Los Angeles.

Dr. Martin Frederick, health officer of Cleveland, Ohio, who stamped out smallpox by cleanliness and no vaccination, has found the disease quite prevalent again this winter.

Homeopaths of Colorado are making an organized effort to secure control of one of the State Insane Hospitals.

Through the efforts of Dr. C. E. Sawyer, of Marion, Ohio, the Ohio Association of Charities has appointed a committee to secure if possible an institution for the treatment of deformed and crippled children in that state.

The Missouri Valley Homeopathic Association met Oct. 22 and 23 at Lincoln, Nebraska, and held an enthusiastic and well-attended meeting, but held itself up to ridicule by assiduously endorsing some fool resolutions about kissing.

Success warns the public against a plausible agent who works among doctors and dentists, and collecting in advance. The publishers of Success offer a reward for his apprehension.

Dr. A. P. Williamson has been under the weather recently suffering from influenza.

Dr. E. M. Jacobs, Manitowoc, Wis., has been visiting in Chicago recently.

Dr. Emily F. Swett is president of the Western New York Homoeopathic Society.

Dr. Thos. L. Dedrick (Hahn., Phila., '96), whose connection with Peary the Arctic explorer and whose disagreements have been commented on by the public press is at home in Washington, N. J.

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HENRY C. ALDRICH, M. D., and
RALPH ST. J. PERRY, M. D., Editors.

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It pays to provide up-to-date reading matter for your office table. Patients are more apt to wait for you if you are busy, less apt to wander off to some other doctor, or to go home and get well without your services. You lose patients, families and money by not offering your patrons some inducement to wait for you, some amusement to while away the tedious moments of waiting. We know this from actual experience. The thoughtful physician in this respect is the successful one in business. Believing that our readers will appreciate this fact we have arranged the following

CLUBBING OFFERS FOR THE SEASON OF 1902-1903.

OFFER NO. 1.

Frank Leslie's Popular Monthly, or Good House Keeping	\$1.00	Regular price-
Success	1.00	\$4 00
Everybody's Magazine or Good Housekeeping	1.00	Our price-
Minneapolis Homeopathic Magazine	1.00	\$2 00

OFFER NO. 2.

Frank Leslie's Popular Monthly	\$1.00	Regular price-
Good Housekeeping	1.00	\$5 00
Success	1.00	Our price-
Everybody's Magazine	1.00	\$2 50
Minneapolis Homeopathic Magazine	1.00	

OFFER NO. 3.

Review of Reviews, or Lippincott's Magazine, or Art Inter-	2.50	Regular price-
change, or The Independent, or New England Magazine,	1.00	\$6 00
or World's Work, or Current Literature, or Country Life	1.00	Our price-
Success	1.00	\$3 00
Minneapolis Homeopathic Magazine	1.00	

OFFER NO. 4.

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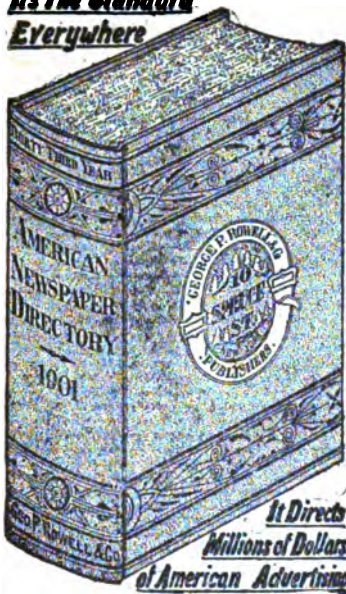
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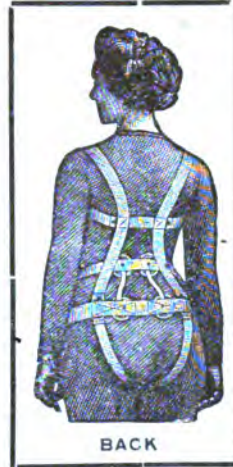
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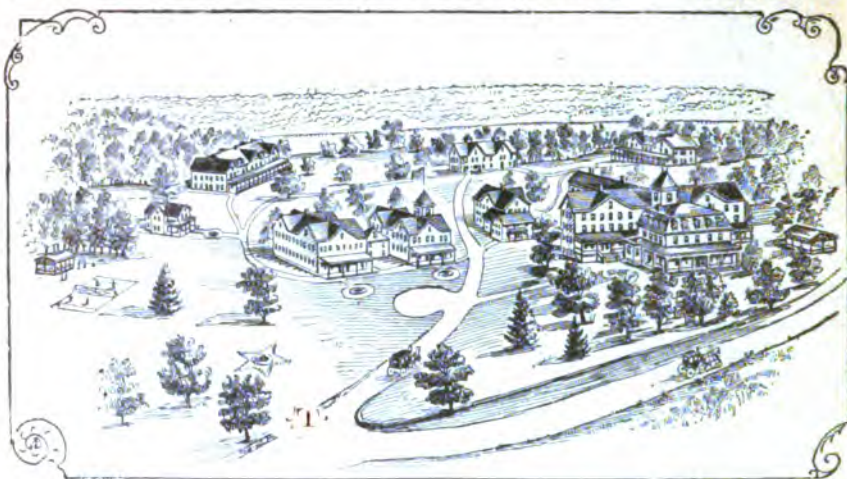
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